UNDERSTANDING VENTURE CAPITAL STRUCTURE: A TAX EXPLANATION FOR CONVERTIBLE PREFERRED STOCK

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The capital structures of venture capital-backed U.S. companies share a remarkable commonality: overwhelmingly, venture capitalists make their investments through convertible preferred stock.[1] Not surprisingly, much of the academic literature on venture capital has sought to explain this peculiar pattern.[2] Financial economists have developed models showing, for example, that convertible securities efficiently allocate control between the investor and entrepreneur,[3] signal

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[1] Section I.A., *infra*, outlines the recent empirical research on venture capital structure. By way of background, preferred stock offers investors more senior rights than common stock. Typically, preferred stockholders have a prior claim to dividends and proceeds of a liquidation (a term that, in the venture capital context, typically includes certain sales of the business as well as dissolutions). Preferred stockholders usually also have superior "control" rights. They often have extra voting power on certain issues and, in the venture capital context, the right to appoint a designated number of the board of directors. Preferred stock is "convertible" if it can be exchanged for a designated number of common shares. Such conversion usually occurs at the option of the investor but, in the venture capital context, it is also mandatory after a successful initial public offering (IPO).

[2] *See* George G. Triantis, *Financial Contract Design in the World of Venture Capital*, 68 U. CHI. L. REV. 305, 322 (2001) (reviewing PAUL GOMPERS & JOSH LERNER, THE VENTURE CAPITAL CYCLE (1999)) (noting that convertible preferred stock is a distinctive feature in venture capital finance).

[3] *See, e.g.*, THOMAS HELLMANN, IPOs, ACQUISITIONS AND THE USE OF CONVERTIBLE SECURITIES IN VENTURE CAPITAL (Graduate Sch. of Bus., Stanford Univ., Research Paper No. 1702, 2000), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=257608 (explaining how convertible securities implement "an optimal trade-off between the need to allocate cash flows" and the desire to make efficient exit decisions); Erik Berglöf, *A Control Theory of Venture Capital Finance*, 10 J.L. ECON. & ORG. 247, 248 (1994) (noting that the allocation of control and returns that convertible preferred stock achieves "protects the initial contracting parties as much

the entrepreneur's talent and motivation,[4] and align the incentives of entrepreneurs and venture capitalists.[5]

In this Article, we examine the influence of a more mundane factor on venture capital structure: tax law. Portfolio companies[6] issue convertible preferred stock to achieve more favorable tax treatment for the entrepreneur and other portfolio company employees. The goal is to shield incentive compensation from current tax at ordinary income rates, so managers can enjoy tax deferral (until the incentive compensation is sold, or longer) and a preferential tax rate.[7] No tax rule ex-

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as possible against dilution and extracts from a future buyer of the firm"); William W. Bratton, *Venture Capital on the Downside: Preferred Stock and Corporate Control*, 100 MICH. L. REV. 891 (2002) (examining preferred stockholders' control when companies perform poorly). *But cf.* STEVEN N. KAPLAN & PER STRÖMBERG, FINANCIAL CONTRACTING THEORY MEETS THE REAL WORLD: AN EMPIRICAL ANALYSIS OF VENTURE CAPITAL CONTRACTS 28 (Ctr. for Research in Security Prices, Working Paper No. 513, 2000), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=228134 (stating that control theories "do not fully explain VC financings"); Paul A. Gompers, Ownership and Control in Entrepreneurial Firms: An Examination of Convertible Securities in Venture Capital Investments 3 (1998) (unpublished manuscript, on file with the Harvard Law School Library) ("The use of convertible financing needs to be understood in the context of the broad range of control mechanisms that are employed by venture capitalists.").

[4] *See, e.g.*, FRANCESCA CORNELLI & OVED YOSHA, STAGE FINANCING AND THE ROLE OF CONVERTIBLE DEBT (London Bus. Sch., Working Paper No. 253-1997, 1997), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=48581 (finding that convertible securities can prevent signal manipulation by the entrepreneur); Jeremy C. Stein, *Convertible Bonds as Backdoor Equity Financing*, 32 J. FIN. ECON. 3, 15 (1992) ("A convertible issue reveals a firm to be of medium quality, whereas an equity issue reveals a firm to be of bad quality."); Gompers, *supra* note 3, at 27 ("[C]onvertible preferred equity is a potentially effective means of screening out low ability entrepreneurs . . . ."); Leslie M. Marx, Contract Renegotiation in Venture Capital Projects 22 (2000) (working paper, on file with the Harvard Law School Library) (finding that "good entrepreneurs use a combination of debt and the granting of control rights to distinguish themselves from bad entrepreneurs").

[5] *See, e.g.*, Richard C. Green, *Investment Incentives, Debt, and Warrants*, 13 J. FIN. ECON. 115, 129–30 (1984) (suggesting that convertibles are "particularly well suited to the problem of controlling risk incentives"); Leslie M. Marx, *Efficient Venture Capital Financing Combining Debt and Equity*, 3 REV. ECON. DESIGN 371, 372 (1998) (exploring which capital structure optimizes the level of intervention by the venture capitalist); William A. Sahlman, *The Structure and Governance of Venture-Capital Organizations*, 27 J. FIN. ECON. 473, 510 (1990) (noting that "[f]lexible conversion terms alter the risk-and-reward-sharing scheme" and encourage entrepreneurs to build value); Gompers, *supra* note 3, at 1 ("[U]se of a convertible security, as opposed to straight equity or straight debt financing, serves to motivate the founder to exert the proper effort and avoid improper risk taking.").

[6] By "portfolio company," we mean a firm that is financed by a venture capitalist.

[7] Stock that an individual holds for more than one year is generally eligible for the long-term capital gains rate. *See* section 1(h). If other conditions are satisfied, including a five-year holding period, the owner of stock in a small business is eligible for a further rate reduction under section 1202. A holder of small business stock can also benefit from the "rollover" rule of section 1045, under which tax that otherwise would be due from a sale of stock is deferred if the taxpayer reinvests sale proceeds in other qualifying stock.

Unless otherwise indicated, the phrase "section" refers to a section of the Internal Revenue Code of 1986 (I.R.C.), as amended and codified at 26 U.S.C. (2000). The phrase "regulation" re-

plicitly connects the employee's tax treatment with the issuance of convertible preferred stock to venture capitalists. Rather, this link is part of tax "practice" — the plumbing of tax law that is familiar to practitioners but, predictably, is opaque to those, including financial economists, outside the day-to-day tax practice.[8] Despite its obscurity, this tax factor is likely of first-order importance.[9] Intense incentive compensation for portfolio company founders and employees is a fundamental feature of venture capital contracting.[10]

Venture capital structure thus performs double duty, addressing standard contracting concerns (which are the grist of the existing academic literature) while also reducing taxes. Our analysis places convertible preferred stock at the intersection of two sets of contracts: a set of viable "economic" contracts that respond to control, signaling, and incentive problems associated with early-stage, high-tech financings, and a set of viable "tax" contracts that minimize the tax on incentive compensation. While some economic contracts yield less desirable tax results, and some tax contracts yield less desirable economic results, convertible preferred stock reflects the intersection of the two sets — a straightforward (and now familiar) way to pursue both economic and tax goals.[11] This dual role is the key to its dominant position.

In elucidating the tax advantages of convertible preferred stock, we highlight an important tax subsidy for the venture capital market that is well understood among high-tech entrepreneurs and investors, but otherwise is largely unknown. Although this subsidy has developed inadvertently, it has an interesting structure. The government does not provide funds directly to companies it selects (a familiar technique

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fers to regulations promulgated by the U.S. Department of the Treasury (the Treasury) to implement the Internal Revenue Code.

[8] To be sure, this tax strategy is aggressive because it is based on naïve economic assumptions, as discussed below. Nonetheless, the tax strategy is widely used, and the tax authorities have shown no appetite for challenging it. *See infra* section III.B.

[9] Of course, tax planning does not always feature prominently in venture capital structure. As Professor Bankman shows in an important paper, new ventures are often structured as corporations, even though use of the partnership form would enable venture capitalists to maximize the tax reduction associated with tax losses. Joseph Bankman, *The Structure of Silicon Valley Start-Ups*, 41 UCLA L. REV. 1737, 1738 (1994). However, Bankman focuses on the tax treatment of venture capitalists, not the entrepreneurs and managers on whom we focus here. *Id.* at 1747. *But see id.* at 1740 n.3 (noting the tax benefit that managers gain from convertible preferred stock). Empirical evidence suggests that entrepreneurs and managers are indeed tax sensitive. *See* PAUL A. GOMPERS & JOSH LERNER, WHAT DRIVES VENTURE CAPITAL FUNDRAISING? 8 (Nat'l Bureau of Econ. Research, Working Paper No. W6906, 1999), *available at* http://papers.nber.org/papers/w6906.pdf. In addition, the tax planning discussed in this Article strengthens incentive compensation, a central feature of venture capital contracting. *See infra* section I.B.

[10] *See infra* section I.B.

[11] We are grateful to Thomas Hellmann for suggesting this framework.

outside the United States[12]), or to all companies. Instead, venture capital investors serve as the subsidy's gatekeepers. As a practical matter, only companies that can attract venture capital investment receive this tax subsidy. Our analysis thus adds a different twist to the familiar debate over whether the government should provide subsidies through the tax system, instead of through direct expenditures or favorable regulatory treatment.[13]

Finally, as a matter of academic craft, our analysis suggests the difficulty of financial modeling for activities in which low-visibility, "practice"-level patterns are of first-order significance. Unless informed by institutional knowledge deep enough to reveal such patterns, models will miss a significant factor that is influencing behavior.

The Article proceeds as follows: Part I reviews the two elements of the venture capital landscape on which our analysis builds: the pervasive use of convertible preferred stock and the importance of highly incentivized compensation for employees. Part II surveys the current range of explanations for the ubiquity of convertible preferred stock. Part III explains why granting convertible preferred stock to venture capitalists is thought to reduce the tax burden on managers' incentive compensation. Part IV considers other ways of pursuing this tax objective and shows that each bears potentially significant costs. After explaining how the tax advantages that we identify here function as a subsidy for venture capital, Part V evaluates the unusual characteristics of this subsidy's structure.

I. TWO ELEMENTS OF THE VENTURE CAPITAL LANDSCAPE

Our analysis of the influence of tax law on venture capital structure builds on two distinctive features of venture capital contracting. The first is the ubiquity of convertible preferred stock. As an empirical matter, venture capitalists typically receive this form of security when investing in early-stage companies. The second is the pervasiveness of incentive compensation. Portfolio company employees receive it as a means of addressing the extreme uncertainty, information asymmetry,

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[12] *See* DIRECTORATE GENERAL ENTERPRISES, EUROPEAN COMM'N, EUROPEAN TREND CHART ON INNOVATION: TREND REPORT: "INNOVATION FINANCE" 5–8 (2001), *available at* http://trendchart.cordis.lu/Reports/Documents/Innovation_Finance_Dec2000.pdf); ORG. FOR ECON. COOPERATION & DEV., GOVERNMENT VENTURE CAPITAL FOR TECHNOLOGY-BASED FIRMS 9–11 (1997).

[13] *Compare, e.g.*, Stanley S. Surrey, *Tax Incentives as a Device for Implementing Government Policy: A Comparison with Direct Government Expenditures*, 83 HARV. L. REV. 705, 734 (1970) (criticizing tax expenditures), *with* Edward A. Zelinsky, *Efficiency and Income Taxes: The Rehabilitation of Tax Incentives*, 64 TEX. L. REV. 973, 975–76 (1986) (defending tax incentives); *see also* MARK KELMAN, STRATEGY OR PRINCIPLE? THE CHOICE BETWEEN REGULATION AND TAXATION 5 (1999) (assessing "the practical virtues and pitfalls of regulatory taxation").

and potential for opportunism inherent in early-stage ventures.[14] These two elements provide the context for our tax analysis: the use of convertible preferred stock as a financing instrument favorably influences the tax treatment of portfolio company employees' incentive compensation.

A. The Ubiquity of Convertible Preferred Stock

The widespread use of convertible preferred stock in the venture capital market stands in stark contrast to its use in publicly traded corporations. Only some ten percent of U.S. public companies in Standard & Poor's COMPUSTAT database have an outstanding class of convertible preferred stock.[15] In contrast, this security is practically the exclusive means of external financing for U.S. venture capital-backed companies. Steven Kaplan and Per Strömberg provide the most recent data. Their sample includes 118 U.S. portfolio companies and 200 venture capital-backed financing rounds, of which 159 were completed between 1996 and 1999.[16] Fourteen different U.S. venture capital partnerships led these rounds, and more than 100 different venture capital partnerships made investments.[17] Of the 200 rounds, 189, or 94.5%, used convertible preferred stock.[18] This finding is consistent with earlier surveys.[19]

Thus, we start our analysis with a clear landmark: a monolith dominates the landscape of U.S. venture capital structure. Explaining this phenomenon has shaped much of the academic venture capital literature.

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[14] The term "uncertainty" refers to contingencies that *none* of the parties can definitively predict (for example, the success of a firm's research and commercialization efforts, the market's ultimate receptivity to a firm's product, the success of competing research efforts, and macroeconomic and industry conditions), while "information asymmetry" refers to circumstances in which one party knows more about a particular fact relevant to the business than the other party does (for example, an employee or manager knows more about how hard she works than the venture capitalist does).

[15] Calculations performed by the authors based on COMPUSTAT data.

[16] KAPLAN & STRÖMBERG, *supra* note 3, at 9–10.

[17] *Id.* at 9, 11.

[18] *Id.* at 13. Of the 189 rounds, 159 used convertible preferred stock exclusively (79.5%), while an additional 30 included other types of securities as well (bringing the total to 94.5%). *See id.* at 50 tbl.1. While 72 rounds used a particular variant of convertible preferred stock called participating preferred stock, the difference is not significant to our analysis. *See id.*

[19] *See* Gompers, *supra* note 3, at 15 (noting that in a sample of twenty-eight financing rounds completed during the early stage of a venture capital limited partnership, the venture capitalists received convertible preferred stock in all but five rounds); *see also* Sahlman, *supra* note 5, at 504 (describing the specific terms involved in structuring convertible preferred stock agreements in the venture capital context).

B. The Role of Intense Incentives in Venture Capital Contracting

All financial contracting confronts three fundamental problems: uncertainty, information asymmetries, and agency costs.[20] These problems are especially acute in high-tech startups. Because these ventures are in an early stage and the relevant technologies may well be untested, most of the important decisions bearing on the company's success have not yet been made. This reality exacerbates not only uncertainty, but also information asymmetries between investors and entrepreneurs, as "intentions and abilities are far less observable than actions already taken."[21] Entrepreneurs may exploit their informational advantage for their private benefit.[22] The potential for these agency costs is aggravated by the significant variance associated with early-stage companies' expected returns.[23]

A pivotal response to these contracting problems is the structure of the entrepreneur's compensation. Because of information asymmetries and uncertainty associated with future management decisions, the contract between venture capital investors and portfolio company managers is incomplete; ex ante, the parties cannot specify what actions the managers should take to increase firm value. Perhaps more dramatically than any other element of venture capital contracting, the portfolio company's compensation structure responds to this problem by creating high-powered performance incentives that align the interests of investors and employees. An overwhelming percentage of management's compensation depends on firm performance. The potential for dramatic appreciation in the value of stock and options thus offsets low salaries.[24]

A highly incentivized compensation structure also reduces information asymmetries concerning the skills of entrepreneurs and managers. Because an entrepreneur has better information about her skills than the venture capital investor, and because a highly incentivized com-

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[20] This discussion draws on Ronald J. Gilson, *Engineering a Venture Capital Market: Lessons from the American Experience* (working paper, forthcoming 55 STAN. L. REV. (2003), on file with the Harvard Law School library).

[21] *Id.* at 13.

[22] *See* Gompers, *supra* note 3, at 6.

[23] *See generally* JOHN H. COCHRANE, THE RISK AND RETURN OF VENTURE CAPITAL (Nat'l Bureau of Econ. Research, Working Paper No. 8066, 2001) (noting the high variance of venture capital returns).

[24] Using intense managerial performance incentives to align management and investor incentives also creates a parallel agency problem. In effect, such incentives may encourage managers to take unwise risks because their share of potential gains will be considerably larger than their share of losses. Other elements of the venture capital contracting structure, especially its governance aspects, provide high-powered monitoring to balance the high-powered incentives. *See* Gilson, *supra* note 20, at 19–21. *See generally* PAUL MILGROM & JOHN ROBERTS, ECONOMICS, ORGANIZATION AND MANAGEMENT 240 (1993) (explaining that "more resources should be spent monitoring when it is desirable to give strong incentives").

pensation structure is worth more to individuals with stronger skills, an entrepreneur's willingness to accept such compensation signals her skill level. In effect, every intense incentive serves also as a signal.[25]

While other elements of venture capital contracting also respond to extreme levels of uncertainty, information asymmetries, and agency costs, management compensation is central. Thus, we can expect factors that facilitate intense incentive compensation to be an important influence on venture capital structure. As we will see, this link helps explain the ubiquity of convertible preferred stock; using this security as a vehicle for venture capital investment reduces the tax cost of implementing intensely incentivized management compensation.

II. CURRENT EXPLANATIONS FOR THE USE OF CONVERTIBLE PREFERRED STOCK

A significant literature has sought to explain the ubiquity of convertible preferred stock in venture capital structure. These accounts show that one or more of the formal characteristics of convertible preferred stock, as it is used in the venture capital context,[26] solve one of the incomplete contracting problems that venture capital investment presents.[27] These theories have explanatory power, in our view, and are reinforced by the tendency of contracts to become standardized: once a market practice develops, parties find advantages in conformity even if the practice is not a perfect fit. Yet the power of standardization should not be overstated, since parties will depart from market practice when a departure is profitable enough to overcome the information costs they will incur.[28] In addition, standardization does not

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[25] Gilson, *supra* note 20, at 22; Gompers, *supra* note 3, at 4–5.

[26] The convertible preferred stock typically used in the venture capital context has features that are unique to this application. Most important, the overwhelming majority of this convertible preferred stock provides for automatic conversion on the occurrence of an IPO. Kaplan and Strömberg provide empirical evidence of this characteristic. *See* KAPLAN & STRÖMBERG, *supra* note 3, at 21 (noting that venture capital financings commonly include securities with automatic conversion provisions, that these conditions generally relate to an IPO, and that they "require the IPO to exceed a designated common stock price, dollar amount of proceeds, and/or market capitalization for the company"). Black and Gilson were the first commentators to discuss the incentive function of this contractual term. *See* Bernard S. Black & Ronald J. Gilson, *Venture Capital and the Structure of Capital Markets: Banks Versus Stock Markets*, 47 J. FIN. ECON. 243, 257–64 (1998) (noting that an IPO enables entrepreneurs to regain control of their ventures).

[27] *See* sources cited *supra* notes 3–5, and accompanying text.

[28] Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or "The Economics of Boilerplate")*, 83 VA. L. REV. 713, 718–40 (1997) (arguing that path dependency may dictate the continuation of one contracting form among an array of potential substitutes); *see also* Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 592–609 (1984) (discussing information-cost barriers to introducing new capital market instruments).

explain how a practice first developed. On this point, four factors suggest that the prevailing explanations are incomplete.

First and most important, the core preferences that define convertible preferred stock — a preference over common stock in dividend payments and liquidation — have only limited significance in the venture capital context. Second, other securities can easily duplicate the control features of convertible preferred stock. Third, while the conversion feature is said to allocate control between managers and venture capitalists on the question whether the firm is sold to an acquirer or to public investors, in practice this feature is unlikely to operate as modeled. Finally, existing accounts do not explain why convertible securities appear to be used less frequently outside the United States.

A. The Limited Significance of the Formal Attributes of Convertible Preferred Stock

Convertible preferred stock provides preferences over common stock in three areas: the payment of dividends, priority in liquidation, and governance control. None of these preferences is sufficiently robust and unique to explain fully the near-universal use of convertible preferred stock in the venture capital context.

1. Dividend Preferences. — Put simply, a dividend preference in favor of preferred stock prohibits the payment of a common dividend before the payment of a preferred dividend. The critical fact in evaluating the importance of this preference is that, according to the legal bible of Silicon Valley venture capital investing, "corporations being financed with venture capital money are rarely in a position to pay dividends to their venture capital investors,"[29] let alone to the holders of their common stock. And if no dividends are paid on common stock, the dividend preference is unimportant.

To be sure, this preference can prove meaningful in some cases. To be effective, the dividend preference must be cumulative, so that preferred dividends will accrue even if not currently paid. In that event, the barrier to paying a common dividend will grow with time. Making the dividend cumulative, however, is insufficient to make the preference meaningful because of the low probability that the portfolio company will want to pay a common dividend before the convertible preferred stock is converted either in an acquisition or (automatically) in an IPO. Thus, a second step is necessary to give the cumulative dividend preference real teeth: requiring the company to pay accumu-

[29] Lee F. Benton et al., *Hi-Tech Corporation: Amended and Restated Certificate of Incorporation*, *in* 1 VENTURE CAPITAL & PUBLIC OFFERING NEGOTIATION 8-1, 8-8 (Michael J. Halloran et al. eds., 3d ed. Supp. 2002).

lated preferred dividends before common stockholders receive any liquidity on their investment. Parties can implement this condition mechanically by adding two features. First, they need to incorporate accumulated but unpaid dividends into the liquidation preference and treat an acquisition of the portfolio company as a liquidation. Second, they need to adjust the conversion ratio to reflect accumulated but unpaid dividends.

But a more economically meaningful preference is hardly a universal practice:

> [M]ost dividend provisions do not make dividends either mandatory or cumulative. . . . Typically, venture capital financed companies do not reasonably expect to be able to pay dividends to their stockholders prior to going public, at which point the Preferred Stock will have converted into Common Stock and the entitlement to dividends will have ceased.[30]

2. Liquidation Preferences. — Like the dividend preference, the preferred stock's liquidation preference *could* have economic significance in some cases, but often proves insignificant. The reason is that the dominant input in early-stage technology companies is human capital. In transforming human capital into a product through research and development, these ventures often have few hard assets, especially if they subcontract out capital-intensive operations like manufacturing, so the venture-backed portfolio company engages in only human capital-intensive activities. The result undercuts the value of the liquidation preference. In liquidation, holders of convertible preferred stock cannot expect a significant payment because few, if any, assets will remain after creditors are paid. The portfolio company presumably will have spent invested cash by then, since venture capitalists typically finance firms in stages.[31] A failed Internet startup, for example, might have a customer list, some computers and Aeron

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[30] *Id.* at 8-8 to 8-9; *see also* KAPLAN & STRÖMBERG, *supra* note 3, at 18 (noting that cumulative preferred dividends were present in forty-six percent of the financings in their study). Although some practitioners have expressed the view that Benton and his coauthors understate the pervasiveness of cumulative dividends, we suspect that the presence of cumulative dividends is a phenomenon similar to that of participating preferred stock in the venture capital context: they are of relatively recent origin and affect only a subset of convertible preferred issuances.

[31] *See* CORNELLI & YOSHA, *supra* note 4, at 1 ("Because of the great uncertainty and high failure risk of new ventures, a widely used financing technique is the infusion of capital over time."); Sahlman, *supra* note 5, at 506 ("Venture capitalists rarely, if ever, invest all the external capital that a company will require to accomplish its business plan: instead, they invest in companies at distinct stages in their development."). While venture capitalists obviously will not want to share their invested cash with the entrepreneur and managers in the unusual circumstance in which assets remain after paying off creditors, venture capitalists have other means to prevent such a transfer, aside from a preference. For instance, they can effectively give themselves a veto by requiring a supermajority vote for a liquidation.

chairs, and maybe a patent, but is also likely to owe back-rent, payroll, and other liabilities.[32]

This is not to say that the liquidation preference has no impact, but rather that its impact occurs in circumstances other than a "real" liquidation following a portfolio company's failure. A merger or sale of substantially all the assets of the portfolio company typically counts as a liquidation that triggers the liquidation preference. In such cases, the venture capitalists have a prior claim on acquisition proceeds and are thus entitled to the lion's share of the sale of a "zombie" venture whose business essentially breaks even.[33]

For instance, assume that venture capitalists invest $1 million in a firm for 10,000 shares of convertible preferred, which would represent 50% of the common stock upon conversion, while managers pay $10,000 for 10,000 shares of common. If the firm is ultimately sold for $1.3 million, the venture capitalists would not convert; instead, they would collect their $1 million liquidation preference, while common shareholders would receive $300,000.

Venture capitalists can claim an even larger share of acquisition proceeds if they receive "participating" preferred securities, a type of convertible preferred stock that enables venture investors to share in the proceeds of "liquidation" along with the common shareholders if the proceeds exceed the amount of the preference. In the above example, venture investors would claim their $1 million liquidation preference and *also* receive half of the remaining $300,000, leaving common shareholders with only $150,000.

Admittedly, the preference would have a real effect in this context, protecting the venture capitalists' investment in zombie cases.[34] Even if this scenario constitutes only a subset of cases, lawyers presumably would still want to provide for it, since lawyers are supposed to worry about even remote risks. Yet while the zombie scenario certainly helps to explain the preference, we wonder whether it looms so large in the parties' minds as to be the sole, or even the main, determinant of capital structure; after all, the stereotypical risky venture-backed firm is either a "home run" or a total failure. Moreover, the importance of the participation feature should not be overstated, since it is both recent in

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[32] One way to test whether Internet startups have assets in liquidation is to ask whether failed ventures have filed for bankruptcy — a proceeding that would be worthwhile only if there were assets remaining to divide up among creditors. Based on conversations with practitioners, we understand that few companies file such bankruptcies. We spoke with half a dozen practitioners based in Silicon Valley during 2001 and 2002. These practitioners requested that their names and affiliations not be disclosed.

[33] Practitioners sometimes refer to this scenario as "going sideways."

[34] Even in this scenario, in which the preferences appear to be meaningful, there may be a risk, as William Bratton suggests, that a court would not respect such a preference. *See* Bratton, *supra* note 3, at 925 (noting that case law, especially in Delaware, is hostile to preferences).

origin[35] and present in only some thirty-six percent of convertible preferred issuances.[36] Something else must be at work to explain this long-term trend.

A second effect of the preference — especially if participating preferred securities are used — is to encourage venture capitalists to favor exit through acquisitions rather than through IPOs. While venture capitalists retain their preference in an acquisition, they lose it in a successful IPO because their securities automatically convert to common stock.[37] This effect is also unlikely to be sufficient to account for the ubiquity of convertible preferred stock. Venture investors and portfolio company management may well favor different means of exit, especially since an acquisition typically will change management's position dramatically. A participation feature may exacerbate this tension. However, management's exit preference can be expected to be a subject of ex ante bargaining,[38] and as a practical matter, allocation of control over exit is not fully contractable. While it is easy to arm either party with a formal veto, it is difficult to provide an exclusive approval right, because either party will typically have the practical capacity to block either track. Negotiation of an acquisition over management's objections or of an IPO over the venture capitalists' objections is thus unlikely to be successful.

3. Allocation of Control. — A final characteristic of convertible preferred stock is that it facilitates the separation of control and cash flow rights. Venture capitalists typically have more control rights than cash flow rights (for example, they might claim more than half of the board seats but only one-quarter of the profits from an IPO). This setup enables venture capitalists to monitor the firm without correspondingly reducing managers' share of profits, a step that would undermine management incentives.[39] In this investor-oriented control structure, venture capitalists receive board seats, and detailed covenants protect investors from management opportunism in specified contexts. To be clear, the formal elements of convertible preferred stock *do* play a role in separating control from cash flow rights. The form has a greater effect here than in the case of liquidation and dividend preferences.

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[35] *See* Benton et al., *supra* note 29, at 8-11 (describing the use of participating preferred stock as "[t]he most significant change during recent years in the terms of the Preferred Stock being issued").

[36] *See* KAPLAN & STRÖMBERG, *supra* note 3, at 13. Participating preferred stock also offers tax advantages over traditional convertible preferred stock. For a discussion, see *infra* notes 96, 105, 107, and accompanying text.

[37] *See* HELLMANN, *supra* note 3, at 3. The IPO typically must attain a specified valuation in order to trigger automatic conversion.

[38] *See id.* at 5; Black & Gilson, *supra* note 26, at 258–59.

[39] *See* KAPLAN & STRÖMBERG, *supra* note 3, at 6; Gompers, *supra* note 3, at 3.

However, other securities can accomplish the same result, which suggests that the separation of control and cash flow rights cannot alone explain the prevalence of convertible preferred stock. As Professor Thomas Hellmann puts it, "there are typically several ways of combining standard securities to implement the same optimal contract. . . . These are thus different labels for the same solution."[40] Covenants can appear not only in the terms of the preferred stock, but also in a purely contractual investors' rights agreement; in fact, in the typical transactions, restrictions appear in both documents.[41] Likewise, while a transaction can allocate board representation between common and preferred stockholders, it can also allocate representation among different classes of common stock.[42]

To an extent, the pervasiveness of convertible preferred stock probably derives from efficiencies of standardization.[43] Yet the question remains why this security became the market standard in the first place.

B. *Financial Models of Convertible Preferred Stock in Venture Capital Structure*

The financial economics literature offers three explanations for the ubiquity of convertible preferred stock in venture capital structure: creating incentives and signaling, separating cash flow and control, and allocating control rights in decisions about exit.[44] While we admire the analysis in these models, we question whether they can fully

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[40] HELLMANN, *supra* note 3, at 20; *see also* KAPLAN & STRÖMBERG, *supra* note 3, at 26 ("In the contracts we study, control rights are important and separate from cash flow rights."); Gompers, *supra* note 3, at 3 ("The use of convertible financing needs to be understood in the context of a broad array of control mechanisms that are employed by venture capitalists."). Kaplan and Strömberg found that the venture capitalist has significant control before the IPO and that control mechanisms are separable from cash flow allocation. *See* KAPLAN & STRÖMBERG, *supra* note 3, at 24 ("VC financings allow VCs to separately allocate cash flow rights, voting rights, board rights, liquidation rights, and other control rights.").

[41] *See* Robert V. Gunderson, Jr. & Lee F. Benton, *Hi-Tech Corporation: Investors' Rights Agreement*, *in* 1 VENTURE CAPITAL & PUBLIC OFFERING NEGOTIATION 9-1, 9-34 (Michael J. Halloran et al. eds., 3d ed. Supp. 2001). Kahan and Yermack note that covenants are costly to renegotiate and thus argue that convertibility is a superior alternative for publicly traded bonds, because in this context renegotiation costs are high. *See* Marcel Kahan & David Yermack, *Investment Opportunities and the Design of Debt Securities*, 14 J.L. ECON. & ORG. 136, 140 (1998). But Gompers responds that renegotiation is much cheaper in the VC context, and so covenants should be — and are — used. *See* Gompers, *supra* note 3, at 9–10.

[42] *See* JACK S. LEVIN, STRUCTURING VENTURE CAPITAL, PRIVATE EQUITY, AND ENTREPRENEURIAL TRANSACTIONS ¶ 205.1, at 2-22 (2001) ("[Entrepreneur] and VC can agree upon an allocation of directors completely different from the equity split through the use of: [a] voting trust agreement[, a] voting trust[, v]oting and nonvoting common[, v]oting and nonvoting preferred[, and e]lection of different classes of directors by different classes of stock.").

[43] *See generally* Kahan & Klausner, *supra* note 28.

[44] *See supra* notes 3–5 and accompanying text.

explain, to use Kaplan and Strömberg's phrase, "real world" venture capital structure.[45] As the previous section suggests, these efforts to derive optimal financial contracts, and then to observe their appearance in the real world, present three problems.

First, they assume that the dividend and liquidation preferences of convertible preferred stock are robust in the context of early-stage venture capital contracting. This assumption is particularly important in incentive and signaling models, which rely on the liquidation preference to make deals unattractive to low-quality entrepreneurs and managers. Yet if the liquidation preference has only limited significance, as we have argued, these models have less explanatory power. Other than in the zombie scenario, there should be little difference between the prevailing capital structure and an all-common capital structure. Thus, while the models explain the right to convert as a way of mitigating a manager's incentive to increase risk (because the conversion right allows the venture capital investor to share in any upside resulting from managerial risk-taking),[46] the same mitigation should also occur in an all-common capital structure. Convertible preferred stock is used, the models claim, to protect the venture capitalist if the venture fares poorly, allowing managers to profit only from good outcomes. The preference thus should encourage good management performance and, relatedly, signal the quality of managers who accept this incentive. But again, if the preference has only limited significance, incentives and signals should be similar to those in an all-common capital structure.[47]

Second, the models assume, typically implicitly, that convertible preferred stock is necessary to separate control from cash flow.[48] However, this desired allocation of control does not require a cash flow preference. Different control rights could just as easily be assigned to different classes of securities having the *same* cash flow rights, for instance, through an all-common capital structure coupled with a share-

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[45] *See* KAPLAN & STRÖMBERG, *supra* note 3, at 2 ("Venture capitalists . . . are real world entities who most closely approximate the investors of theory.").

[46] *See* Gompers, *supra* note 3, at 15 (stating that because entrepreneurs are typically not monitored on a day-to-day basis and have the ability to cut corners in their desire to get to the market quickly, convertible securities are one mechanism that venture capitalists can use to reduce such risk-taking); *cf.* Green, *supra* note 5, at 125 (describing the risk-incentive problem in the context of convertible debt).

[47] For the same reason, the liquidation preference should not be especially effective in motivating venture capitalists to intervene to save failing ventures. *Cf.* Marx, *supra* note 5, at 372 ("[W]hile pure debt gives the venture capitalist too great an incentive to intervene, and pure equity too little, a mixed debt-equity sharing rule enables the optimal level of intervention to be achieved.").

[48] Hellmann's model is a notable exception. *See* HELLMANN, *supra* note 3, at 8–13.

holders' agreement.[49] To be sure, one might respond that this alternative is functionally identical to a capital structure featuring a convertible preferred security, but this response makes the issue far too easy. The models do not limit themselves to deriving the optimal financial contract for venture capital structure, but also seek to explain the security choices actually observed. Thus, the models may explain the substantive characteristics of venture capital structure, itself no small accomplishment, but they do not fully explain the market's remarkable convergence on a single form of security.

Third, Thomas Hellmann's interesting model highlights the impact of security design on the allocation of the power to choose an exit method — either an IPO or an acquisition.[50] Yet it is doubtful that the parties can fully contract in advance about exit in a venture capital-backed corporation, because human capital is the dominant nonfinancial input. In an IPO, for example, it may be extremely difficult to secure an underwriter if the venture capitalists oppose the offering. Similarly, negotiating an acquisition may be extremely difficult if management opposes the transaction and can be expected not to cooperate in the buyer's due diligence investigations and in transition efforts. Managers have particular clout in a human capital-dominated company, because transition is the mechanism that helps transfer the company's most important assets. In any event, Hellmann recognizes that parties can formally implement the substance of an optimal contract in a variety of ways. Thus, the model is insufficient to explain the form of security actually observed in the market.[51]

C. Convertible Preferred Stock Is Not as Pervasive in Other Jurisdictions

Finally, existing accounts do not explain why convertible securities appear less frequently in other jurisdictions. For instance, in a recent empirical study, Professor Douglas Cumming found that American venture capitalists are much less likely to use convertible preferred eq-

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[49] William Bratton argues that a preference is needed to transfer control automatically to the venture capitalist when the portfolio company enters bankruptcy. *See* Bratton, *supra* note 3, at 910–11. However, such a transfer would not necessarily occur automatically. As Bratton acknowledges, bankruptcy is "a drastic and costly step to have to take," *id.* at 911, and there is a risk that preferences will not be respected in bankruptcy. Given these costs and risks, venture capitalists may well be unable to use bankruptcy as a means of strengthening their negotiating positions.

[50] *See* HELLMANN, *supra* note 3, at 4 ("We examine how venture capital contracts optimally allocate control rights and cash flow rights in a world where there is some uncertainty about whether exit should occur through an acquisition or an IPO.").

[51] For this reason, Black and Gilson rely on an implicit contract governing the entrepreneur's right to choose an IPO backed up by a reputation market. *See* Black & Gilson, *supra* note 26, at 254–56.

uity to finance Canadian companies than they are to finance American ones.[52] If these securities truly are the best way to address incomplete contracting problems in the venture capital setting, why are they not prevalent everywhere? Variables absent in other jurisdictions must be present in the United States that make this capital structure especially appealing. In the following Part, we show that U.S. tax law is one such variable.[53]

III. THE IMPACT OF CONVERTIBLE PREFERRED STOCK ON THE TAXATION OF INCENTIVE COMPENSATION

To this point, we have shown that existing explanations for the widespread use of convertible preferred stock have explanatory power but do not tell the whole story. The security's superior cash flow rights often lack economic significance — indeed, the zombie scenario is the only one in which the liquidation preference appears to have real bite. In contrast, the security's superior control rights *do* have broad economic significance, but can be replicated easily. Why, then, is convertible preferred stock so dominant? In part, the answer may lie in the tendency of contracts to become standardized, but the question remains how this form became the market practice.

Another critical factor, U.S. tax law, has largely escaped academic notice. Specifically, by awarding convertible preferred stock to venture capitalists, portfolio companies seek to lower the tax burden on management's incentive compensation. Because such high-powered incentives are central to venture capital contracting, this tax advantage is a key reason for the security's pervasiveness.

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[52] *See* Douglas J. Cumming, United States Venture Capital Financial Contracting: Evidence from Investments in Foreign Securities 2 (2002) (unpublished manuscript, on file with the Harvard Law School Library), *available at* http://hal-web.usc.edu/cleo/ALEA/cumming.pdf (noting that convertible securities are not the most commonly used capital structure for American venture capital in Canada). In our conversations with Canadian tax and corporate practitioners, some described convertible preferred stock as a commonly used financing device, as in the United States, while others warned of adverse Canadian tax consequences from using this security, *see infra* note 60, and indicated that other securities are more commonly used, including convertible debt or multiple classes of common stock. Like Canadians, Europeans also use convertible preferred stock somewhat less frequently than do Americans. *See* ANDREAS BASCHA & UWE WALZ, FINANCING PRACTICES IN THE GERMAN VENTURE CAPITAL INDUSTRY: AN EMPIRICAL ASSESSMENT 13–14 (Ctr. for Fin. Studies, Working Paper No. 2002/08, 2002), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=267572 (noting that convertible preferred stock is used less frequently in Germany); ARMIN SCHWIENBACHER, AN EMPIRICAL ANALYSIS OF VENTURE CAPITAL EXITS IN EUROPE AND IN THE UNITED STATES 4 (EFA 2002 Berlin Meetings Discussion Paper, 2002), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=302001 (observing that the use of convertible preferred stock is less common in European venture capital transactions).

[53] Our preliminary analysis also suggests that because of differences in the Canadian tax system, convertible preferred securities can pose special tax problems in Canada and are less necessary to achieve analogous tax goals. *See infra* note 60.

The critical event in this context is the awarding of common stock or options to the founding entrepreneur and other portfolio company managers near in time to a venture capital financing round. New equity incentives for management and new funding for the company typically go hand in hand. A round of venture capital financing will prompt the firm to expand and set new targets, occasions that require the firm to hire new managers and create further incentives for existing employees.[54]

When a manager receives equity in a venture capital-backed company, U.S. tax law regards this equity as yielding a blend of compensation for services ("compensatory return") and appreciation in the value of an investment ("investment return").[55] The manager has a strong tax preference for investment return for two reasons. First, compensatory return is generally taxed earlier than investment return. In an early-stage venture, such accelerated timing is a particular hardship: entrepreneurs and managers typically do not have cash to pay taxes because their equity compensation is not yet liquid. Second, compensatory return is taxed at the rate for ordinary income, which is approximately double the rate applicable to long-term capital gain. An even lower rate can apply to investment return, moreover, if the manager's equity qualifies as "small business stock" and certain other conditions are satisfied.[56] Given these differences, the manager will strongly prefer to pay tax as an investor, and the firm will have a parallel preference in order to contain the cost of offering incentive compensation.[57]

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[54] For example, it is not uncommon for venture capitalists to condition the funding of a financing round on the portfolio company's hiring of an important executive. *See* KAPLAN & STRÖMBERG, *supra* note 3, at 20.

[55] The premise here is that the entrepreneur is contributing services instead of intellectual property. If the parties can characterize the entrepreneur's contribution as property, the rules regarding compensation would not apply. Instead, the entrepreneur would not owe any tax upon contributing the property to the venture, would have carry-over basis in the stock equal to her basis in the contributed property, and would have capital gain or loss upon selling the stock. In such a case, the tax planning strategies described above for converting ordinary compensation income to capital gain would not be necessary. Yet many types of contributions cannot be characterized as property. New employees face the additional hurdle that they must invest by themselves — and not as part of a group of investors who control the firm, as required under section 351. *See* LEVIN, *supra* note 42, ¶ 201.1, at 2-5 to 2-6.

[56] The maximum stated ordinary income tax rate in 2002 is 38.6%, although the effective tax burden is higher when payroll taxes and the phaseout of various deductions are considered. In contrast, the maximum stated rate for long-term capital gain on stock is 20%. *See id.* at 2-5. Under section 1202, this rate is reduced to 14% if various conditions, including a five-year holding period, are satisfied, although the alternative minimum tax may soak up some of this additional savings. *See id.* ¶ 201.1, at 9-26 n.1.

[57] Of course, the tax disadvantage to the manager of receiving ordinary income is theoretically offset by a tax advantage to the new firm. It can deduct amounts that managers include as ordinary income, but not amounts included as capital gain. Obviously, in deciding whether an arrangement truly is tax-advantaged, we must consider the tax position of *all* parties to a transac-

Given the conceptual and practical difficulties of separating compensatory and investment returns, tax law relies on formal conventions to draw these boundaries. Planners, in turn, game these lines to achieve a kind of tax alchemy — transmuting compensatory return into investment return. For instance, when managers receive stock as compensation, they commonly elect to pay tax on the compensatory return right away at ordinary income rates — when the stock still has a low value — so that subsequent appreciation is taxed as investment return. There is a real tradeoff here: to obtain a lower rate and tax deferral for *future* profits, the manager must pay a *current* tax on the profit to date — a tax that would not otherwise be due yet — thereby forgoing the use of these tax dollars. Is this tradeoff favorable? The answer is clearly "yes" if the profit to date — and thus the currently taxed ordinary income — is a very low amount or, better yet, zero. A low initial tax valuation of the stock is critical to this tax alchemy so that the lion's share of the manager's return can be taxed more favorably. Planners use an analogous strategy — which also depends on a low tax valuation for the common stock — when a manager receives an option grant.

Thus, from a tax planning perspective, much depends on the valuation of the portfolio company's common stock at the time the manager receives equity compensation. The problem is that this award typically coincides with a venture capital financing round. Although the manager wants a low valuation for her *own* stock for tax purposes, she still wants venture capitalists to pay a high price for *their* investment. To see the tension between these goals, suppose that a company simultaneously sells common stock to venture capital investors at $100 per share and to managers at $1 per share. Without more, managers who elect to be taxed on the stock's grant-date value would have $99 of current ordinary income, reflecting their bargain purchase of the port-

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tion. *See* Ronald J. Gilson et al., *Taxation and the Dynamics of Corporate Control: The Uncertain Case for Tax-Motivated Acquisitions*, *in* KNIGHTS, RAIDERS AND TARGETS: THE IMPACT OF THE HOSTILE TAKEOVER 271 (John C. Coffee, Jr. et al. eds., 1988). It is well understood that if the firm were in the same tax bracket as the manager, the tax strategy described above would not make sense. *Cf.* MYRON S. SCHOLES ET AL., TAXES AND BUSINESS STRATEGY: A PLANNING APPROACH 201–02 (2d ed. 2002) (noting the tax inefficiency of incentive stock options if the employer and the employee are subject to the same tax rate). Yet in the venture capital context, the firm's effective tax rate is typically much lower. If the firm is taxed as a corporation, as is usually the case, it has vastly more deductions than income in its early years and is not likely to pay tax for an extended period of time. Not only is the present value of compensation deductions much reduced, but these deductions also could be lost entirely if the firm experiences certain ownership changes. *See* section 382. If instead the firm is a partnership, the partners could theoretically use the deductions, but many of them would be tax exempt in the usual case. Moreover, even taxable partners may be unable to use these deductions because of the passive loss rules. *See* section 469. Thus, the conventional wisdom in such tax planning is to favor the tax position of the manager, not of the firm.

folio company's stock.[58] In contrast, if the venture capitalist invests instead in convertible preferred stock, managers are likely to claim a much lower valuation for their common stock, thereby avoiding this up-front tax.

At this point, the reader should recognize an apparent inconsistency. For the common stock to have a low value, the preferred stock must be worth more. The most likely claim for a difference in value is the preferred stock's superior cash flow rights. Yet, as we emphasized previously, these preferences have limited significance in the venture capital context. As a result, the premium accorded to convertible preferred stock should be correspondingly modest. Indeed, the main source of value in both convertible preferred and common stock is the same: so-called "option" value, or the possibility of earning superior returns if the venture succeeds. Since the tax advantage sought here rests on economically naïve assumptions, a caveat is in order. While we believe the use of convertible preferred stock in venture capital-backed portfolio companies is tax motivated, we do not mean to suggest that this tax strategy is unassailable — merely that it is unassailed. Yet tax planners have commonly employed this aggressive strategy and, in the venture capital context, tax authorities have not routinely challenged it.[59]

To develop these points, this Part explains the tax rules governing awards of equity or options to portfolio company managers, and how convertible preferred stock figures into a strategy to reduce the tax cost of incentivizing managers, whether the compensation is common stock, incentive stock options, or nonqualified options. To be sure, tax rules alone do not provide a full explanation for the popularity of convertible preferred stock. In the United States, the tax planning goal — transmuting the manager's compensatory return into investment return — can be accomplished with at least three alternative securities: convertible debt, a unit composed of straight preferred stock and common stock, or partnership "profits" interests. However, as Part IV demonstrates, the first two alternatives introduce other tax or business disadvantages. The third has a distinct tax advantage, but is usually considered too complicated.[60]

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[58] *See infra* p. 894.

[59] To use the language of lawyers, we would not necessarily give a legal opinion that the strategy "works," but we understand that aggressive valuations are routinely used.

[60] An exploration of Canadian tax considerations is beyond this Article's scope (and, indeed, beyond our expertise). Our preliminary sense, based on conversations with Canadian corporate and tax practitioners, is that the use of convertible preferred stock as a tax-planning strategy in Canada is at once more difficult and less necessary than in the United States. This practice is more difficult because firms that issue certain types of preferred stock can be subject to various adverse tax consequences, including a special tax upon paying dividends. *See, e.g.*, ROBERT COUZIN, FOREIGN INCOME: BUSINESS OPERATIONS IN CANADA, at A-57 to A-59 (BNA Tax

A. *The Importance of the Value of Common Stock in the Tax Treatment of Incentive Compensation*

The first step in our analysis is to explain why common stock's grant-date value affects the manager's tax treatment when the manager's compensation is either stock or options. Then, we will consider how the common stock's valuation is affected when the venture capitalist receives convertible preferred stock instead of common stock.

1. *The Manager Receives Common Stock.* — Assume that a portfolio company has secured a commitment from a venture capital firm to invest $1 million in exchange for 10,000 common shares (that is, to pay $100 per share), while the founding entrepreneurs hold another 10,000 common shares. Further assume that, in anticipation of growth, the company recruits a new chief executive officer and chief financial officer at the same time. To align their incentives with those of the venture capitalist, each officer purchases approximately five percent of the company's common stock as part of her employment contract: 1100 shares each (out of 22,200 post-issuance outstanding shares) at $1 per share.[61]

Management Portfolio 995-2d, 1997). The practice is less necessary because other strategies can help executives attain deferral and a reduced tax rate. *See generally* Daniel Sandler, *The Tax Treatment of Employee Stock Options: Generous to a Fault*, 49 CANADIAN TAX J. 259 (2001). Specifically, under section 7 of the Canadian Income Tax Act, an employee who receives a compensatory option: (1) is not taxable until the option is exercised; and (2) the tax rate on this gain is reduced by half (or, to be more precise, a deduction is allowed for half of the taxable amount). *See* Income Tax Act, R.S.C., ch. 1 (5th Supp.), pt. 1, § 7 (1992); *see also* Sandler, *supra*, at 272–73. This provision in effect gives the employee deferred low-tax treatment without requiring elaborate structuring. Nevertheless, there may still be advantages to reducing the initial value of the common and thus to using convertible preferred securities (or some other senior security). First, the treatment described above, like the ISO regime, is available only if the exercise price on the option is not less than the common's fair market value on the grant date. Second, the analysis changes if the venture qualifies as a Canadian controlled private corporation under section 125(7) of the Canadian Income Tax Act. *See id.* On one hand, the above exercise price requirement is then waived (reducing the need for convertible preferred). *See id.* at 273–74. On the other hand, a $500,000 exclusion is provided for capital gain. *See* Income Tax Act, R.S.C., ch. 1 (5th Supp.) pt. 1, § 110.6; Sandler, *supra*, at 273–74. Thus, even though profit earned *before* exercise is still taxed at a reduced rate, profit earned *after* exercise is taxed at an *even lower* rate (0% for the first $500,000). There would seem to be an advantage, then, in shifting gains to the period after exercise, a role that convertible preferred securities could play. It would be worthwhile to explore whether convertible preferred securities are more commonly used in Canadian-controlled private corporations than in other Canadian ventures. In any event, we encourage others with the requisite expertise to analyze the implications of Canadian tax law more thoroughly.

61 Thus, the venture capitalists and founders each have 45.05% of the firm, while the executives each have 4.95%. This hypothetical seems reasonable in light of the empirical evidence concerning senior-management equity stakes in venture capital-backed companies. *See, e.g.*, Malcolm P. Baker & Paul A. Gompers, Executive Ownership and Control in Newly Public Firms: The Role of Venture Capitalists (1999) (working paper, on file with the Harvard Law School Library), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=165173 (showing that, on average, CEOs of venture capital-backed firms held 19% of equity prior to any IPO).

This simple deal saddles the new managers with a prohibitively high tax bill. When service providers receive property as compensation, such as the common stock in our example, they generally pay tax, at ordinary income rates, based on the property's fair market value.[62] The rule is simplest if the property is fully vested. When the managers receive their stock, they owe tax based on the difference between the $1100 each paid and the shares' fair market value. Each manager's shares are arguably worth $110,000, because the venture capitalist paid this amount per share.[63] Thus, each manager would have approximately $109,000 of ordinary income, a daunting prospect for a manager whose cash salary may be insufficient to offset the tax. Thereafter, each manager has a $110,000 basis in the shares and will have capital gain or loss on any appreciation or depreciation realized when she ultimately sells the shares (or later, if she reinvests the sale proceeds in qualifying small business stock).[64] Thus, the sizable compensatory return is taxed initially and the investment return is taxed later.

The story is a bit more complicated if the managers' shares are subject to a vesting requirement, as is commonplace, but the undesirable result remains the same as long as the managers make a popular tax election. Assume the shares do not vest for three years. Under the default rule, no income is recognized and no tax is due until this vesting date. The amount of income recognized depends on the shares' value on the vesting date, not their value on the grant date.[65] If each manager's shares are worth $5.5 million after three years, that entire value (less the $1100 each paid for the shares) is taxed as ordinary income on the vesting date. The manager owes the tax even if she does not (or cannot) sell the shares, because, for example, there is not yet a public market for the company's stock. To avoid this outcome, managers typically make a section 83(b) election. They pay tax as if the shares were vested from the beginning (that is, the managers have ordinary income based on grant-date fair market value).[66] No other tax

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62 *See* section 83(a); Treas. Reg. § 1.83-1(a).

63 A more aggressive pro-taxpayer argument, sometimes advanced by practitioners, is that the manager's stock — which represents 4.95% of the firm — should be valued at 4.95% of the value of the $1 million contributed by the venture capitalist, or $49,500. The premise here is that the firm's value is given by this cash contribution (for example, assuming that only this cash would remain if the firm liquidated immediately). But this theory fails to explain why the venture capitalist was willing to pay $1 million for less than *half* of the firm — a fact strongly suggesting that the firm's value exceeds $2 million. For a discussion of these alternative valuation theories in an all-common capital structure, see LEVIN, *supra* note 42, ¶ 202.1.1, at 2-4 to 2-5. For a critique of the liquidation method of valuing a start-up, see *infra* pp. 898–900.

64 *See* section 1045.

65 *See* Treas. Reg. § 1.83-1(f).

66 *See* Morton v. Comm'r, 1997 T.C.M. (RIA) ¶ 97,166, at 1095, 1103 ("Generally, fair market value is 'the price at which the property would change hands between a willing buyer and a will-

is due until the shares are sold, and long-term capital gains rates apply to the sale if the holding period has been satisfied.[67] Under the election, then, subsequent appreciation is taxed more favorably than the stock's initial value (that is, as deferred long-term capital gains instead of immediate ordinary income).

For the managers' tax treatment, then, the key fact is the value of their shares on the grant date. If this valuation derives from the close-in-time price that venture capitalists paid, the managers confront the worst possible outcome: paying a large current tax at ordinary income rates, while holding illiquid stock and little or no cash.

2. The Manager Receives Stock Options. — Valuation also plays a central role when the managers' incentive compensation takes the form of stock options. These options come in two varieties: "incentive stock options" (ISOs) and "nonqualified stock options" (NQOs). A low grant-date valuation of the common stock is helpful here for two reasons. First, it enables options to qualify as ISOs, which offer the manager significant tax advantages. Second, if the options cannot qualify as ISOs, and must instead be tax-disadvantaged NQOs, well-advised managers can use self-help to minimize the tax disadvantages of NQO status — in effect, to simulate ISOs — as long as they can claim a low valuation for the underlying common stock at the time of exercise (for example, if the options are exercised on the grant date).

(a) Incentive Stock Options. — ISOs offer generous tax treatment to managers and thus are more desirable than NQOs in the venture capital context.[68] As long as certain statutory preconditions are satisfied, managers generally do not include the value of the options in income either when they receive the options or when they exercise them.[69] Tax is due later — at capital gains rates — when managers

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ing seller, neither being under any compulsion to buy or sell, and both having reasonable knowledge of the relevant facts.'" (quoting *United States v. Cartwright*, 411 U.S. 546, 551 (1973))). The fair market value of these shares, when received, is not discounted for the fact that these shares have not yet vested. *See* section 83(b); *see also* Treas. Reg. § 1.83-2.

[67] *See* Treas. Reg. § 1.83-2(a) (providing that "no compensation will be includible in gross income when such property becomes substantially vested"); *id.* § 1.83-4(a) (providing that the holding period for transferred property begins just after it has been transferred). As noted previously, a lower rate will apply to qualifying small business stock. *See supra* note 56. If the taxpayer subsequently forfeits the property, she generally cannot deduct the previously included amount. *See* section 83(b).

[68] Unlike NQOs, ISOs offer no tax deduction to the employer. Thus, it is well understood that ISOs are less tax efficient if the manager and employer are subject to the *same* tax rate. *See, e.g.*, SCHOLES ET AL., *supra* note 57, at 201–02. As noted above, however, the employer in the venture capital context is typically subject to a very low effective tax rate. *See supra* note 57.

[69] *See* sections 421(a) and 422; Treas. Reg. § 14a.422A-1. However, the managers may be subject to alternative minimum tax ("AMT"). This regime, a backup for the income tax, was intended to prevent wealthy taxpayers from making excessive use of so-called tax "preferences," such as generous depreciation deductions. The "spread" on an ISO is treated as a tax preference, causing AMT to be levied on the difference between the exercise price and the underlying stock's

sell the stock they have received by exercising the option. In effect, the managers' entire profit is deferred and then taxed as investment return, not as compensatory return. With NQOs, in contrast, profit earned before managers exercise the options is taxed as ordinary income.

Yet in order for options to qualify for ISOs' souped-up tax treatment, the statute imposes a precondition relating to valuation: the option exercise price cannot be less than the value of the underlying stock on the grant date.[70] Using our example from Part III, if venture capitalists have just paid $100 per share for common stock, the exercise price on managers' options must be at least $100 per share, or the options will not qualify as ISOs. But the options obviously would be much more valuable with a lower exercise price. Indeed, the manager would prefer options with a $1 per share exercise price that still qualified as ISOs. She therefore would like to be able to value the common stock, for tax purposes, at $1 per share on the grant date.[71]

(b) Nonqualified Stock Options. — While a low valuation for the common stock helps options with a low exercise price to qualify as ISOs, other preconditions for ISO treatment sometimes cannot be satisfied, including size limitations and holding periods.[72] If NQO status is unavoidable, well-advised managers can sometimes use self-help to mitigate the adverse consequences of this status, as long as they can assert a low valuation for the common stock.

The problem with NQOs is that employees generally owe tax — at ordinary income rates — when they exercise the options;[73] the tax is based on the difference between the options' exercise price and the

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fair market value when the option is exercised. *See* section 56(b)(3). The marginal tax rate generally is 28%. *See* section 55(b)(1)(A)(i)(II) (outlining the rate for taxable excess beyond $175,000). Under some circumstances, taxpayers can claim a tax credit for the amount of the AMT they have paid, reducing their income tax in later years. For a discussion, see Barbara J. Raasch & Judith L. Rowland, *Stock Option Planning*, 77 TAXES, Jan. 1999, at 39, 41.

[70] *See* section 422(b)(4). The Internal Revenue Code imposes several other preconditions as well, including a holding period and an annual limit on the size of the option grant. *See* section 422(a)(1) (providing that, in order to qualify, a taxpayer must not dispose of the shares within two years of the date of the grant of the option or within one year after the transfer of the shares to the holder); section 422(d) (providing that the aggregate fair market value of the underlying shares, determined when the option is granted, cannot exceed $100,000 per calendar year per employee).

[71] While ISOs and common stock can provide similar tax benefits to executives, at-the-money ISOs can also provide a financial accounting benefit. For a discussion, see *infra* note 82.

[72] *See supra* note 70.

[73] *See* Treas. Reg. § 1.83-7(a). If the option has a "readily ascertainable fair market value" when granted, the option is taxed when it is received, and not when it is exercised. *Id.* Yet options rarely satisfy this condition. For instance, an option that is not freely transferable does not have "readily ascertainable fair market value" within the meaning of the regulation. Treas. Reg. § 1.83-7(b).

stock's fair market value at the time of exercise.[74] In contrast, when the executive sells the stock, gain or loss is capital in character.[75] Compared to ISOs, then, NQOs yield income that is taxed earlier and at a higher rate, but only on profits earned *before* the option is exercised. Any profit earned *after* exercise is taxed like the return on ISOs — that is, at capital gains rates when the executive ultimately sells the stock. Thus, as a self-help strategy to make the tax treatment of NQOs approximate that of ISOs, managers can exercise the option early, thereby attaining deferred capital gains treatment for post-exercise appreciation.

Such self-help exacts two potentially significant costs, each of which is mitigated by a low tax valuation for the underlying common stock. First, to exercise the options managers must pay the exercise price (or borrow it from the company). Second, exercise of the options triggers a current tax liability if the stock's value exceeds the exercise price.[76] For example, assume the options' exercise price is $100 per share, and the stock is worth $150 per share when the options are exercised. Managers must pay $100 per share to the company, plus tax on the $50-per-share profit. These problems are mitigated if the exercise price is low and the stock's fair market value is also low when the options are exercised. To be clear, the manager does not really want the stock's value to be low; rather, she wants *to treat it as low* for tax purposes. Thus, the cost to the manager is far lower if the options' exercise price is $1 per share and the common stock is valued at $1 per share when they are exercised. Managers can achieve this result if the common stock is valued for tax purposes at only $1 per share when the options are granted, and the executives exercise the options immediately.[77] To secure this tax benefit, entrepreneurs and managers sometimes negotiate for the right to exercise options immediately, even if the options are not yet vested. In a "pre-exercise," as this step is sometimes called, the executive exercises the option, but the underlying stock is subject to vesting. Again, the key to this self-help is a low tax valuation for the common stock.

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[74] Treas. Reg. § 1.83-7(a). The firm has a corresponding deduction that, as noted above, typically is unimportant in the venture capital context. *See* Treas. Reg. § 1.83-6; *supra* note 57.

[75] *See* BORIS I. BITTKER ET AL., FEDERAL INCOME TAXATION OF INDIVIDUALS ¶ 40.04, at 40-33 through 40-35 (3d ed. 2002); *see also* JOHN L. UTZ, NONSTATUTORY STOCK OPTIONS, at A-5 n.39 (BNA Tax Management Portfolio 383-3d, 2001).

[76] *See* David Schizer, *Executives and Hedging: The Fragile Legal Foundation of Incentive Compatibility*, 100 COLUM. L. REV. 440, 468–70 (2000) (discussing the economic advantages to executives of delaying exercise of their options).

[77] In effect, option holders are trying to duplicate the result of a section 83(b) election — a step that, for technical reasons, is not available for nonqualified options. *See* Treas. Reg. § 1.83-2(a) (requiring the transfer of property within the meaning of Treas. Reg. § 1.83-3(a) as a condition of election); Treas. Reg. § 1.83-3(a)(2) ("The grant of an option to purchase certain property does not constitute a transfer of such property."); *see also* Schizer, *supra* note 76, at 493–94.

B. The Impact of Convertible Preferred Stock on the Valuation of Common Stock

We have seen that the tax treatment of managers' incentive compensation turns on the valuation of common stock on the grant date. When the manager and venture capitalist receive identical stock at approximately the same time, and the venture capitalist pays more, the tax law dictates a commonsense result: the price the venture capitalist pays for the common stock sets its fair market value, and the discount offered to the employee generally is taxed as ordinary income.[78] To avoid this result, the tax planning goal is to drive a wedge between the tax valuation of the manager's equity compensation, on one hand, and the price the venture capitalist pays for its investment, on the other. This is the tax reason for giving venture capitalists convertible preferred stock instead of common stock.[79]

For tax purposes, the manager would like to value this common stock at $1 per share, thereby avoiding current tax and allowing *any* subsequent appreciation to enjoy tax deferral and reduced rates. Yet what is the theory for according such a low value to the stock, given that the venture capitalists paid so much more for their investment? The practitioner's standard answer is that the venture capitalists have a senior security; if the firm liquidates immediately after the parties make their investments, the managers will receive only $1 per share. The key to a reduced tax bill, then, is to value the common stock based on a hypothetical immediate liquidation in which preferred stockholders claim almost everything.

To an extent, it is fair to claim that the common stock is worth less than the convertible preferred stock. The latter has greater control rights and a liquidation preference that can prove valuable in the zombie scenario. Yet these advantages only go so far. Indeed, if priority in liquidation is not worth very much in early-stage high-tech ventures, as we argue in Part II, preferred stock should not be much more valuable than common stock. Rather, the value of the common stock in a capital structure with preferred stock (or any senior security) is determined largely by its option value.[80] In a venture capital portfolio

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[78] *See* Morton v. Comm'r, 1997 T.C.M. (RIA) ¶ 97,166, at 1095, 1104 ("Determining fair market value is often difficult where, as here, the subject property is the capital stock of a closely held corporation for which no public market exists. In these circumstances, an actual arm's-length sale of the stock in the normal course of business within a reasonable time before or after the valuation date is the best evidence of fair market value."); Culp v. Comm'r, 58 T.C.M. (CCH) 207, 212 (1989) (stock was valued at the price at which the taxpayer had submitted bids for the stock in the over-the-counter market near the time at which he received the stock as compensation).

[79] In a thoughtful early work, William Sahlman alludes to this tax planning goal, although he does not develop the point. *See* Sahlman, *supra* note 5, at 510.

[80] *See* Fischer Black & Myron Scholes, *The Pricing of Options and Corporate Liabilities*, 81 J. POL. ECON. 637, 638 (1973). Theoretically, another way for the government to challenge these

company, the common stock is effectively a long-term option with a high variance, so the value will be substantial — approaching the price the venture capitalist pays for convertible preferred stock that is also, to a significant extent, an option. Yet this option value is irrelevant if the common stock's value, for tax purposes, is based on proceeds that hypothetically would be received in an immediate liquidation. In other words, liquidation-based valuation is economically naïve, to say the least.

Despite the aggressiveness of looking to liquidation value, many practitioners are willing to use it.[81] In their view, IRS auditors may not be sophisticated enough to recognize the option value inherent in common stock. The auditors' more sophisticated bosses may be reluctant to compel taxpayers to undertake the potentially complex and subjective task of computing option value. In any event, Joseph Bartlett has observed that "[t]he Internal Revenue Service has never challenged successfully the view that the issuance of shares with a liquidation preference — ordinarily labeled preferred stock — can 'eat up' value in an amount equal to the preference, thereby reducing the common stock (the 'cheap stock') to marginal value."[82] Similarly, Julie

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valuations is to value the services provided in exchange for the stock. *Cf.* Larson v. Comm'r, 1988 T.C.M. (CCH) 1637, 1638 ("Where property received by a taxpayer does not have a readily ascertainable fair market value, its value may be determined by reference to the fair market value of the consideration given for the property."). We are not aware of any effort by the federal government to use this valuation-of-services approach in the context of venture capital startups.

[81] There is some authority for using liquidation value, but much of this authority involves partnerships, not corporations. *See, e.g.*, St. John v. United States, 84-1 U.S.T.C. 9158 (C.D. Ill. 1983) (using liquidation value to value partnership profits interest); *see also infra* pp. 907–09 (discussing treatment of partnership profits interests). Other cases involve corporations that are reasonably likely to liquidate. *See, e.g.*, Learner v. Comm'r, 45 T.C.M. (CCH) 923, 927 (1983) (in measuring the value of a charitable deduction, approving the liquidation method for a taxpayer's minority interest, since there were reasonable prospects that the corporation would be liquidated, including the out-of-date nature of firm's steel-manufacturing equipment and a pending derivative suit in which shareholders were seeking liquidation); Berckmans v. Comm'r, 20 T.C.M. (CCH) 458, 467 (1961) (in measuring whether a taxpayer received compensation for services through bargain purchase of stock, approving the use of liquidation value because the corporation was inactive and unproven, and emphasizing that, although the firm might become a vehicle for acquiring active businesses, it might also remain an empty shell); Estate of Garrett v. Comm'r, 12 T.C.M. (CCH) 1142, 1150 (1953) (using liquidation value as fair market value, for purposes of estate tax, where a logging company had long ceased to be active, its equipment was antiquated, and its supply of timber nearly exhausted).

[82] 1 JOSEPH W. BARTLETT, EQUITY FINANCE: VENTURE CAPITAL BUYOUTS, RESTRUCTURINGS AND REORGANIZATIONS 82–83 (2d ed. 1995). While the IRS has challenged such valuations in the estate tax area, *see, e.g.*, Rev. Rul. 83-119, 1983-2 C.B. 57, Bartlett emphasizes that it required a statutory change, section 2701, for the IRS to finally shut down the practice. 1 BARTLETT, *supra*, at 83 n.24. Notably, the Securities and Exchange Commission (SEC) has begun challenging these low valuations in a different context. For financial accounting purposes, companies have assigned low valuations to their common stock at the time options are granted to managers. The goal is to keep options from being treated as in-the-money when granted, a precondition for minimizing compensation expense by keeping option expense out of

Robinson, Lee Benton, and Robert Gunderson describe this tax strategy as the primary reason for using convertible preferred stock in venture capital structure.[83]

Practitioners vary in how far they are willing to push this aggressive strategy. A low valuation is probably easier for ISOs than for other structures, since the statute expressly permits "good faith" valuations in determining whether options qualify as ISOs.[84] Likewise, it is helpful for time to pass between the issuance of common stock to executives and the investment by venture capitalists, so that executives can argue that their common stock was worth less at this earlier time before the company made important progress.[85] Similarly, a low value is safer for seed and early-round financings, when the firm does not have a record of increased prices paid in additional financing rounds. A government challenge is more likely if managers buy common stock or receive options at a steeply discounted price shortly before a higher-priced IPO, though practitioners report that the IRS seldom challenges valuations even in this setting.[86]

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the body of the income statement. The SEC has begun raising this issue when reviewing IPO prospectuses. *See* William A. Hines et al., *Identifying and Avoiding "Cheap Stock" Problems*, *in* 2 VENTURE CAPITAL & PUBLIC OFFERING NEGOTIATION, *supra* note 29, at 29A-1, 29A-2 ("In reviewing registration statements for initial public offerings, the SEC staff routinely analyzes whether the issuer has recorded sufficient compensation expense with respect to stock options . . . . This issue has received increasing attention from the SEC staff in recent years.").

83 According to these authors:

> Once the decision has been made to go forward with the investment, choice of security and determination of price represent the venture capitalist's most fundamental decisions. Critical to the choice of security decision is usually the fact that founders and key employees of the Company have bought, are buying, or will buy Common Stock from the Company at a cheap price . . . . If Common Stock were to be sold to the investors at a price [equal to full investment value], the tax consequences to the key employees contemporaneously buying Common Stock could be devastating . . . . As a result, it may be very much in the interest of the founders and key employees that the investors purchase senior securities that can be valued at a price higher than the Company's Common Stock.

Julie M. Robinson et al., *Portfolio Company Investments: Hi-Tech Corporation — Getting to the Term Sheet*, *in* 1 VENTURE CAPITAL & PUBLIC OFFERING NEGOTIATION, *supra* note 29, at 6-1, 6-7.

84 *See* section 422(c)(1).

85 LEVIN, *supra* note 42, ¶ 201.1.2, at 2-6. Another way to depress the common stock's value is to impose restrictions that, by their terms, do not lapse; unlike vesting conditions, these "nonlapse" conditions are relevant in valuing compensation for tax purposes. Although the manager would have ordinary income if the nonlapse condition is later waived for a compensatory purpose, parties might seek to justify the waiver with a *noncompensatory* purpose, a step that many believe avoids this tax cost to the manager. *See* Matthew A. Rosen, *The Many Continuing Uncertainties of Section 83*, in 6 TAX STRATEGIES FOR CORPORATE ACQUISITIONS, DISPOSITIONS, SPIN-OFFS, JOINT VENTURES, FINANCINGS, REORGANIZATIONS & RESTRUCTURINGS 981, 1019–32 (PLI Tax Law & Estate Planning Series, Course Handbook Series No. J-477, 2000).

86 According to several practitioners, the convention in Silicon Valley once was the so-called "ten-to-one rule," in which the executive's common stock was valued at one-tenth of the price

C. Summary

In this Part we have identified the tax advantage of using convertible preferred stock. Managers report a lower tax valuation for their common stock, transforming current ordinary income into deferred capital gain. Ironically, even though the venture capitalist's preference is in some ways more formal than substantive, taxpayers use this form to claim a real substantive benefit: favorable tax treatment for the highly intense management incentives that are central to venture capital contracting.[87] While we assert that a significant reason for using convertible preferred stock is to attain this tax advantage, our argument is less persuasive if there are better ways to pursue this tax goal. In the next Part, we consider likely alternatives.

IV. ALTERNATIVE TAX STRATEGIES

In what ways can high-tech start-up managers seek to transmute ordinary income into deferred capital gain? This Part explores why convertible preferred stock is used instead of three potential alternatives. The first two — convertible debt and a unit composed of straight preferred stock and common stock — would modify the business deal, and could also impose significant tax costs on the venture capitalist. The third alternative — partnership profits interests — is arguably more effective than convertible preferred stock at attaining the desired tax treatment, but presents other tax costs and is sometimes regarded as too complex and unfamiliar.

Moreover, while there are reasons to prefer convertible preferred stock *ab initio*, there are also significant costs in departing from market practice once enough firms have used this capital structure.[88] For example, legal fees are higher. Likewise, more time and resources must be devoted to explaining the unique terms to all relevant parties, and to allaying suspicions that these terms would disadvantage someone. Indeed, entrepreneurs and managers may find it reassuring for their venture to follow market practice, since they otherwise may fear that sophisticated venture capitalists are using an unconventional term to extract a hard-to-identify concession. In other words, standardization and precedent are a response to information asymmetry.

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paid by the venture capitalist for convertible preferred. This rule of thumb, which was reportedly based more on market practice than on a particular authority, is considered conservative by some. One practitioner reported that 1000-to-1 valuation ratios are sometimes used. These conclusions are based on conversations with approximately thirty practitioners from July 2001 through August 2002. These practitioners requested that their names and affiliations not be disclosed.

87 As discussed below, this strategy is less useful in other contexts. *See infra* p. 913.

88 *See* Kahan & Klausner, *supra* note 28, at 766–67. *See generally* Gilson & Kraakman, *supra* note 28.

A. The Venture Capitalist Receives Convertible Debt

In evaluating alternatives, we must remember that the key to enhancing managers' tax treatment is a low grant-date valuation for the common stock. Under the aggressive liquidation method of valuation described above,[89] convertible preferred stock accomplishes this end, but so too would convertible debt.

Empirical evidence suggests that parties sometimes use convertible debt,[90] and some of the economics literature does not distinguish convertible debt from convertible preferred stock for purposes of their analysis.[91] Even so, the use of debt instead of preferred stock changes the deal. Creditors have more powerful remedies in the event of default than preferred stockholders, including the ability to force the firm into bankruptcy.[92] Likewise, debt is higher in priority than preferred equity, although, as noted above, the value of this priority depends on expectations about assets that will be available in liquidation.[93]

In addition, the use of convertible debt instead of convertible preferred stock can increase the venture capitalist's tax bill by generating "phantom income" — that is, income that is taxable before any cash is received.[94] For instance, assume that the security promises the venture capitalist a periodic payment every year but allows the firm to defer this payment. If the security is a debt instrument, this payment is currently taxable as ordinary income, even if the actual receipt is delayed.[95] In contrast, if parties document the security as preferred stock

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[89] *See supra* pp. 898–900.

[90] *See* KAPLAN & STRÖMBERG, *supra* note 3, at 50 tbl.1 (reporting, in a sample of 200 rounds of venture capital financing, 19 rounds employing at least some convertible debt, compared to 159 rounds employing convertible preferred stock).

[91] *See, e.g.*, HELLMANN, *supra* note 3, at 4 n.2 ("[Participating convertible preferred equity] is essentially the same as convertible debt, except that the firm is not required to make regular dividend/coupon payments."); Gompers, *supra* note 3, at 2 n.1 ("The payoff to convertible debt and redeemable convertible preferred equity are essentially equivalent . . . ."); *cf.* CORNELLI & YOSHA, *supra* note 4, at 3 ("Since our model abstracts from taxes and control rights, it would make little difference if we used convertible preferred equity rather than convertible debt.").

[92] Practitioners thus report that firms are reluctant to give the venture capitalist creditor status, if only because this step could make it more difficult to secure bank financing at a later stage. A bank generally prefers not to share with others the ability to force a firm into bankruptcy, because such sharing would reduce the bank's bargaining power.

[93] Moreover, this preference arises only if the convertible debt is actually respected as debt by the parties; this issue is a matter of some concern if interest is not paid on the debt because most startups experience a significant period of negative cash flow.

[94] *See* Peter A. Furci & David H. Schnabel, *Convertible Preferred Stock Investments by Private Funds: A Practical Guide to Tax Structuring*, *in* 10 TAX STRATEGIES FOR CORPORATE ACQUISITIONS, DISPOSITIONS, SPIN-OFFS, JOINT VENTURES, FINANCINGS, REORGANIZATIONS & RESTRUCTURINGS 2001, at 919, 927 (PLI Tax Law & Estate Planning Series, Course Handbook Series No. J-513, 2001) [hereinafter TAX STRATEGIES] (defining phantom income and noting that "[i]nvestors in private funds tend to be very unhappy" when they receive it).

[95] This result arises from the original issue discount (OID) rules, which generally require investors in certain securities to accrue interest income before receiving any cash. *See generally* sec-

and structure the transaction with care, they should owe no tax unless and until the security actually makes a payment.[96] A second tax ad-

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tion 1272. This regime generally applies to bonds that are issued for less than they will pay at maturity, as well as to bonds on which periodic payments may be deferred at the issuer's discretion. *See* section 1273(a) (defining OID as the excess of the stated redemption price at maturity over the issue price); Treas. Reg. § 1.1273-1(b) (stated redemption price at maturity includes all payments other than "qualified stated interest"); *id.* § 1.1273-1(c)(1)(i) (noting that interest is not qualified stated interest unless it is "unconditionally payable").

A creative advisor might be able to avoid this phantom income by structuring the debt security so that it never makes a periodic payment under any circumstances and is not issued at a discount. In other words, the venture capitalist's only compensation would come from the right to convert the bond into common stock. Technically, the bond would no longer be a discount bond (since the redemption price is equal to the issue price, assuming the bond is not converted). Yet there is some risk of phantom income under the "contingent debt" regulations. *See* Treas. Reg. § 1.1275-4. While this regime generally does not apply to traditional convertible bonds, *see id.* § 1.1275-4(a)(4), some practitioners worry that nontraditional convertible bonds, such as those with no coupon or discount, could still be covered by the contingent debt regime or, alternatively, could be bifurcated into a warrant and a discount bond. *See id.* § 1.1275-2(g)(1)–(2) (setting forth the anti-abuse rule that provides for bifurcated treatment of a contingent debt instrument); Treas. Reg. § 1.1275-2(g)(3) (noting that the anti-abuse rule declines to recharacterize convertible debt, but convertible debt in the example provides for annual payments of interest); Rev. Rul. 2002-31, 2002-22 I.R.B. 1023, 1026 (treating contingent convertible bonds as governed by the contingent debt regulations).

[96] In fact, an important planning goal in these transactions is to keep the convertible preferred stock from throwing off phantom income. The key is to avoid triggering section 305, which imputes phantom income on preferred stock in certain circumstances. *See generally* Furci & Schnabel, *supra* note 94, at 931–45 (discussing the imputation of income under section 305 and various strategies used to avoid this result); Glen Kohl et al., *Selected Issues Involving Preferred Stock and Section 305*, *in* 10 TAX STRATEGIES, *supra* note 94, at 757 (discussing the treatment of preferred stock under section 305). Although the nuances of this planning are beyond this Article's scope, three points should be mentioned briefly. First, section 305 does not apply if the stock "participate[s] in corporate growth to any significant extent." Treas. Reg. § 1.305-5(a). Oddly, for this purpose, the fact that a security is convertible does not help. *See id.* ("The determination of whether stock is preferred for purposes of section 305 shall be made without regard to any right to convert such stock . . . ."). Some practitioners are comfortable, however, with similar economic terms that are thought, technically, not to qualify as a "conversion" right. For instance, the investor might receive a claim in liquidation equal to the greater of the liquidation preference or the amount a common shareholder claims. A more conservative fix is to use so-called "participating" preferred stock, which, as discussed above, allows a holder to share in dividends and liquidations as *both* a preferred and a common shareholder. *See* Furci & Schnabel, *supra* note 94, at 934–35; *see also* 2 MARTIN D. GINSBURG & JACK S. LEVIN, MERGERS, ACQUISITIONS, AND BUYOUTS ¶ 1302.3.1 (2001) (discussing the use of participating preferred securities to avoid phantom income under section 305).

Second, assuming that parties do not use participating preferred stock, a standard source of phantom income is a redemption premium. *See* Treas. Reg. § 1.305-5(b)(1) (providing for the accrual of income if the price the issuer pays in redeeming the preferred stock exceeds, by a sufficiently large margin, the price investors initially paid to buy the stock). To avoid this result, preferred stock is often structured to include a periodic dividend payment instead of a redemption premium. With this tweak, taxpayers often take the position that there is no phantom income when these periodic payments are delayed, even though such deferral effectively turns the periodic payments into a redemption premium. *See* Furci & Schnabel, *supra* note 94, at 940–43 (describing this technique as a common strategy for avoiding phantom income but cautioning that legislative history suggests that the IRS has regulatory authority to find phantom income if the issuer has no intention of paying dividends currently). This claim is aggressive for venture capital

vantage of convertible preferred stock over debt is that stock can be eligible for a special reduced tax rate for small businesses under Section 1202.[97] Another modest tax advantage of convertible preferred stock is that, in the unlikely event that the stock actually pays dividends, venture capitalists that are corporations can claim the dividends-received deduction — a tax benefit that would not be available if the security were structured as debt.[98] A countervailing tax consideration is that convertible debt affords the portfolio company a deduction for interest expense, while convertible preferred stock does not.[99] Yet deductions are of limited value to a portfolio company that is likely to accumulate net operating losses over its early years of operation.[100] Therefore, the economic characteristics of a financing transaction involving convertible debt, and its tax consequences for venture capitalists, are sufficiently disadvantageous to make convertible debt financing a generally inferior method of obtaining the tax advantage of convertible preferred stock.

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startups because investors generally do not expect companies to pay dividends while the preferred stock is outstanding. *See* Benton et al., *supra* note 29, at 8-8.

Finally, phantom income is less of a concern if the firm has no earnings and profits (E&P) — as is initially the case with most startups — since dividends (whether phantom or actual) are taxable as ordinary income only to the extent of E&P. *See* sections 301(c), 316(a). Yet "many investors are understandably reluctant to rely" on the absence of E&P because of quirks in its computation. Furci & Schnabel, *supra* note 94, at 930–31 (noting that a company can have E&P in any year that it is profitable, even though losses from prior years dwarf this current E&P).

97 The taxpayer must satisfy a five-year holding period to claim section 1202's reduced rate. With convertible debt, the time before the bond is converted does not count. But with convertible preferred stock, the holding period includes the time prior to conversion. LEVIN, *supra* note 42, ¶ 906.1, at 9-21. In addition, with convertible debt only *post-conversion* gain is eligible for the special rate, whereas with convertible preferred stock the *entire* gain is eligible. *Id.*

98 *See* section 243 (permitting a corporate recipient of a dividend to deduct either 70%, 80%, or 100% of the amount of the dividend, depending upon the extent of the taxpayer's ownership in the firm). While venture capital firms are generally structured as partnerships, any partners that are corporations could claim the dividends-received deduction for their share of the dividend.

99 *See* section 163 (authorizing deductions for interest expense).

100 *See* Joseph Bankman & Ronald J. Gilson, *Why Start-Ups?*, 51 STAN. L. REV. 289, 293–94 (1999); *see also supra* note 57. However, another advantage of debt, noted by Jack Levin, is that redemption of the debt should be treated as tax-free return of capital. Redemption of preferred stock, in contrast, is taxed as a dividend in some circumstances. *See* LEVIN, *supra* note 42, ¶ 603.8, at 6-3 to 6-24; *see also infra* note 104. Still another advantage of debt is that, if the investor is foreign, dividends are often subject to withholding tax while interest typically is not. *See* section 871(h) (sparing certain interest payments to foreign individuals from withholding tax); section 881(c) (same for foreign corporations). This consideration should be relatively unimportant in high-tech startups, though, because the security is unlikely to yield any dividends before being converted.

B. The Venture Capitalist Receives a Unit Composed of Straight Preferred Stock and Common Stock

A second alternative to convertible preferred stock is to give the venture capitalist a unit comprising two securities: straight preferred stock and common stock. The common stock permits the venture capitalist to share in the gains of success, while the preferred stock permits the parties to report an allocation of most of the venture capitalist's investment to it, enabling the entrepreneur to claim a low value for her common stock and the ensuing tax benefits.[101] For instance, assume a venture capitalist invests $1 million in an enterprise. The parties structure the transaction so that the venture capitalist formally pays $990,000 for 9900 shares of preferred stock with a corresponding liquidation preference (100% of the outstanding preferred), and $10,000 for 10,000 shares of common stock (50% of the outstanding common). At the same time, the managers pay $10,000 for 10,000 shares of common stock (50% of the outstanding common). As with convertible preferred stock, the managers can make the (aggressive) argument that the common stock's value is low — $1 per share — because of the preferred stock's priority.

Two factors suggest why this preferred-common unit is less popular than pure convertible preferred stock.[102] First, the unit changes the transaction by giving the venture capitalist a more favorable deal. With typical convertible preferred stock, the venture capitalist must choose between having preferred and having common, but cannot make claims on both simultaneously. In the example in which the venture capitalist invests $1 million for preferred stock that is convertible into 10,000 common shares, if the firm is being acquired for $4 million, the venture capitalist can either convert to common and claim $2 million (half the sale proceeds, as owner of fifty percent of the common) or keep the shares' preferred status and collect only $1 million (the liquidation preference). But with a unit, the venture capitalist can assert both claims at the same time — as both a preferred and a common shareholder. Thus, the venture capitalist can claim $990,000 of the acquisition proceeds through the preferred stock while claiming half of what remains — 50% of $3,010,000, or $1,505,000 — through the common. With a total of approximately $2.5 million, the

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[101] After showing that an entrepreneur would have significant ordinary income if she and the venture capitalists all received common stock, *see* LEVIN, *supra* note 42, ¶ 201.1.1, at 2-4 to 2-5; *see also supra* pp. 893–94, Jack Levin offers this preferred-common unit as a solution to this problem, *see* LEVIN, *supra* note 42, ¶ 202.2, at 2-10. He also discusses convertible preferred stock in connection with this issue. *See id.* ¶¶ 203.1–203.2, at 2-20 to 2-22.

[102] *See* KAPLAN & STRÖMBERG, *supra* note 3, at 49–50 tbl.1 (reporting that 1.5% of the financing rounds in their sample involved preferred-common units, with either convertible or straight preferred stock, while 94.5% involved convertible preferred stock alone).

preferred-common unit yields $500,000 more than convertible preferred stock would yield alone.[103] Entrepreneurs typically would prefer not to give venture capitalists such a lucrative deal.

Second, even if venture capitalists can negotiate the more generous deal — a plausible outcome as market conditions have dramatically enhanced their bargaining power — the unit creates tax problems for them. For instance, in some cases in which venture capitalists sell their preferred stock, all of the sale proceeds could be treated as a dividend.[104] In the previous example, if the venture capitalist sold the preferred stock for $990,000, this entire amount could be taxed as ordinary income (to the extent of the portfolio company's earnings and profits), with no reduction for basis.[105] One way to avoid this tax problem is to use a "participating preferred" security that mimics the business terms of a preferred-common unit, but is convertible in form. Although documented as a single security, participating preferred stock entitles the venture capitalist in a liquidation or acquisition to recover the security's face value and then to share in any profits as if it also held a share of common stock.[106] While the security is economically

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[103] Obviously, this economic difference is relatively insignificant if the firm fails. As discussed above, the failed firm is unlikely to have sufficient assets in liquidation to pay the preferred liquidation preference, let alone to pay anything to common stockholders. *See supra* pp. 883–84.

[104] If the venture capitalist sells the preferred stock back to the firm (for example, pursuant to a mandatory redemption provision), this sale could be treated as a dividend under section 302 if the venture capitalist keeps the common stock, because the venture capitalist's percentage ownership might not decline sufficiently through the redemption. This problem is more significant if the venture capitalist has a majority stake. *See* LEVIN, *supra* note 42, ¶ 603.8, at 6-23 to 6-24. One "fix" would be to require the common stock to be redeemed whenever the preferred stock is redeemed. In any event, as noted above, dividends are taxed as ordinary income only to the extent that the firm has E&P — something that, in a new venture, typically will not happen for a number of years, although there may be E&P by the time the venture capitalist sells the stock. *See supra* note 96.

[105] Another problem is that, theoretically, the venture capitalist could have phantom income under this structure. The IRS might challenge the allocation of purchase price, asserting that the actual issue price of the preferred stock was less than its $990,000 redemption price — notwithstanding the parties' reported allocation of the investment between preferred and common stock — because the common stock was worth more than $10,000. If the IRS challenges the valuation in this way, the preferred stock would have a redemption premium and thus could have phantom income. *See* Treas. Reg. § 1.305-5(b). For a discussion, see 2 GINSBURG & LEVIN, *supra* note 96, ¶ 1302.3.1(2), at 13-22. Obviously, this issue can arise only if the government challenges the parties' low valuation of the common stock — a scenario that many consider unlikely, as discussed *supra* section III.B. In any event, this risk of phantom income disappears if the parties use participating preferred stock; with a single security instead of a unit, they would not need to allocate the purchase price (that is, between common and preferred stock). *Cf.* 2 GINSBURG & LEVIN, *supra* note 96, ¶ 1302.3.1(4), at 13-23 to 13-24 (noting that constructive distribution rules generally do not apply to participating preferred stock).

[106] *See* 2 GINSBURG & LEVIN, *supra* note 96, ¶ 1302.3.1(4), at 13-24 (describing how convertible preferred stock can be given "substantial participation features").

comparable to a unit, it is formally different and, for technical reasons, less likely to saddle the venture capitalist with ordinary income.[107]

In sum, although a preferred-common unit offers managers as strong a tax argument as traditional convertible securities, this structure changes the business deal and introduces a potential tax cost for the venture capitalist. If the parties actually prefer this revised business deal, they will use an alternative — participating preferred stock — that is less likely to saddle the venture capitalist with a new tax cost.

C. *The Use of Partnership Structure and the Grant of Profits Interests to Managers*

The alternatives to convertible preferred stock canvassed so far depend, like classic convertible preferred stock itself, on an aggressive valuation. To establish that their common stock is *not* valuable, the managers claim that the venture capitalist's preferences are *very* valuable. In this respect, taxpayers are relying on the IRS's willingness to ignore the common stock's option value. In contrast, a final alternative avoids aggressive and uneconomic valuations, relying instead on a favorable principle of partnership tax law.

Under straightforward rules of partnership tax, a partner is not currently taxed upon receiving a "profits interest" in the partnership in return for performing or promising to perform services. These interests provide a share only of income that the partnership earns *after* the taxpayer becomes a partner. Unlike a "capital interest," a profits interest yields nothing if the partnership liquidates and distributes prior earnings on the day that the taxpayer becomes a partner. As a result, tax law treats the partner, in effect, as receiving *nothing* when she acquires the partnership interest. This is an economically questionable conclusion, because the profits interest may have considerable value.[108] Even so, the partner is not taxed until she begins sharing the partnership's earnings.[109]

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[107] Because the "preferred" component of this security is inseparable from the "common" component, venture capitalists are never in the position of selling the preferred stock by itself. Hence, they can never be subject to section 302, which, as noted above, can impose adverse consequences on this step. *See supra* note 104; *see also supra* note 96 (discussing other tax advantages to venture capitalists of participating preferred stock).

[108] Just ask a new partner at Cravath, Swaine & Moore whether making partner, and gaining the continued right to use the firm's reputation and assets, affects her net worth.

[109] The details and history of this rule are beyond this Article's scope. In general, a widely followed judicial decision seemed to suggest that profits interests would have to be valued and taxed when received. *See* Diamond v. Comm'r, 56 T.C. 530, 544–47 (1971), *aff'd*, 492 F.2d 286 (7th Cir. 1974). *But cf.* Campbell v. Comm'r, 943 F.2d 815, 823 (8th Cir. 1991) ("[W]e doubt that the tax court correctly held that Campbell's profits interests were taxable upon receipt."). The tax bar responded with a wave of criticism that focused on difficulties in administering this rule. In re-

Armed with this deferral rule for profits interests, managers can ensure that their compensation is taxed on a deferred basis at long-term capital gains rates, with no risk of a valuation challenge by the IRS.[110] As an example, assume that a portfolio company is organized as a partnership, instead of as a corporation. The managers receive profits interests when they begin employment, while the venture capitalist holds a capital interest in return for cash contributions. The parties can allocate voting and governance rights any way that they desire, thereby allowing the separation of control rights and cash flow rights that is central to venture capital contracting. The critical feature, of course, is a "preference" for the venture capitalist's capital interest: if the partnership were to liquidate immediately after the managers received their profits interests, the venture capitalist would have to receive all the assets.[111] As long as the transaction satisfies the formalities of Revenue Procedure 93-27, managers will not have any ordinary income upon receiving the profits interest.[112] Sale of the profits interest generally yields capital gain. Profits earned before the manager sells the interest are taxed as ordinary income, but such income rarely arises in early-stage startups.[113]

In short, the partnership alternative offers essentially the same tax benefits as the convertible preferred stock strategy: replacing current ordinary income with deferred capital gain. Indeed, the partnership

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sponse, the government issued Rev. Proc. 93-27, 1993-2 C.B. 343, which exempts profits interests from current tax as long as the interests satisfy specified requirements. *See id.* at 344.

110 *See* Michael J. Halloran et al., *Agreement of Limited Partnership*, *in* 1 VENTURE CAPITAL & PUBLIC OFFERING NEGOTIATION 1-1, 1-50 (Michael J. Halloran et al. eds., 3d ed. Supp. 1999).

111 *See* Rev. Proc. 2001-43, 2001-34 I.R.B. 101 (providing that the relevant date for determining whether a partnership interest is a profits interest is the grant date, even if the interest is substantially nonvested at the time of grant).

112 *See* Rev. Proc. 93-27, 1993-2 C.B. 343. The Revenue Procedure provides that its favorable tax treatment is not available if the profits interest relates to a substantially certain stream of income, if the partner sells the profits interest within two years, or if the partnership is publicly traded within the meaning of section 7704(b). *Id.*

113 To shelter the manager from this ordinary income, the parties can organize the venture as a corporation, while "wrapping" the corporation in a partnership. In other words, the manager and venture capitalist own a partnership (with profits and capital interests, respectively), and the partnership owns stock in a corporation that holds the venture's assets. With this structure, the manager's profit interest yields only capital gain when the partnership sells the portfolio company's stock in an IPO. One vulnerability of this arrangement, though, is that the partnership seems to serve no purpose — other than allowing managers access to the tax rule for profits interests — and thus the government might disregard it for tax purposes. A further vulnerability is that the manager may be deemed to have received the profits interest in a capacity other than as partner. Even assuming the structure is respected, moreover, it does not *avoid* the tax on ordinary income, but merely shifts the burden from the manager to the corporation, which is still taxed on this ordinary income. As noted above, strategies that generate capital gain for the manager typically impose an offsetting tax cost on the firm and are most sensible when the firm is in a low tax bracket. *See supra* note 57.

strategy is especially effective because it is based on a formal IRS position rather than on unstated practice.

This immunity from valuation-based challenges is a reason to organize startups as partnerships (or, specifically, as limited-liability companies that are taxed as partnerships). An additional tax benefit that Professor Joseph Bankman emphasizes is the potential for partners to deduct startup losses. Yet although startups sometimes use this form, it is not the "standard" structure for startups, for reasons Bankman describes.[114] For instance, the partnership form can complicate the tax positions of foreign and tax-exempt investors.[115] Additionally, partnerships are ineligible for certain tax benefits otherwise available to startups.[116] Partnerships also involve complicated tax reporting on K-1 forms, which are unfamiliar and potentially confusing to many entrepreneurs. In contrast, the convertible preferred approach is accepted and understood: for reasons that suggest path dependence,[117] it would be costly for the venture capitalist to investigate an alternative structure and explain it to entrepreneurs and portfolio company employees.

V. VALUATION RULES AS A SUBSIDY

While our primary purpose in this Article is positive, explaining the tax reason for using convertible preferred stock in U.S. venture capital structure, it is also important to examine this tax planning normatively by asking what goals it promotes. If the policy goal is to conform the treatment of high-tech startup employees (who are now receiving deferred capital gain) with the tax treatment of other employees (who receive immediately taxable ordinary income), then the tax authorities should crack down on this planning by challenging the managers' aggressive and economically naïve valuations.[118]

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[114] *See* Bankman, *supra* note 9, at 1741–47; *see also* Victor Fleischer, The Rational Exuberance of Venture Capital Startups (2002) (working paper, on file with the Harvard Law School Library). Still another advantage of a partnership is that it is easier to sell part of the business without triggering entity-level gain. In contrast, a startup organized as a corporation would have difficulty avoiding corporate-level gain upon selling a portion of its assets. *See* section 311(b). For instance, a spinoff followed by a tax-free acquisition triggers an entity level tax. *See* section 355(e). We are indebted to Andrew Berg for this point.

[115] If the startup generates "unrelated business taxable income" and "effectively connected income," this income will flow through directly to tax-exempt and foreign investors in the venture capital fund, causing them to owe taxes and to file returns. *See* Fleischer, *supra* note 114.

[116] For instance, a fifty percent exclusion for gains from certain "qualified small business stock" is available only for C corporation stock. *See* section 1202(c). Likewise, an investment in one startup sometimes can be replaced, tax-free, with an investment in another startup, but again, this "rollover" is available only for stock in a C corporation. *See* section 1045.

[117] *See generally* Kahan & Klausner, *supra* note 28.

[118] Conventional reasons to pursue such parity include horizontal equity (so that executives who earn the same amount pay the same tax) and efficiency (so that executives who otherwise

But what if the government's goal, instead, is to promote high-tech startups? We take no position here about the wisdom of this goal,[119] but assuming that the government wishes to commit resources to promoting high-tech startups, economically inaccurate valuations may serve a useful purpose.[120] Specifically, the government's tolerance of aggressively low valuations might be understood as a form of tax subsidy for high-tech startups, targeted at a critical feature of the venture capital contracting process: the high-intensity performance incentives provided to managers of early-stage companies. The IRS allows a substantial portion of a high-tech startup manager's compensation — in effect, wages for services — to be taxed as capital gain, instead of as ordinary income.[121]

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prefer to work for established firms are not lured, by tax considerations, to work at high-tech startups).

[119] There is a growing literature on the desirability of government efforts to promote high-tech startups and on the various tax and other measures that might achieve this goal. These measures include changing the tax rate structure and the treatment of net operating losses. These interesting issues, however, are beyond this Article's scope. For a discussion of these issues, see BRONWYN H. HALL, THE FINANCING OF RESEARCH AND DEVELOPMENT (Nat'l Bureau of Econ. Research, Working Paper No. 8773, 2002) (recommending further study of governmental seed capital and subsidy programs to remedy funding gaps for research and development); Rosanne Altshuler & Alan J. Auerbach, *The Significance of Tax Law Asymmetries: An Empirical Investigation*, 105 Q.J. ECON. 61, 70–75 (1990) (discussing the effect of loss limitations on risky activity); Robert Caroll et al., *Entrepreneurs, Income Taxes, and Investment*, *in* DOES ATLAS SHRUG?: THE ECONOMIC CONSEQUENCES OF TAXING THE RICH 427 (Joel B. Slemrod ed., 2000) (finding that high marginal tax rates discourage entrepreneurs from making new investments in their businesses); William M. Gentry & R. Glenn Hubbard, *Tax Policy and Entrepreneurial Entry*, 90 AM. ECON. REV. 283 (2000) (finding that a flatter rate structure encourages entrepreneurship); Roger H. Gordon, *Can High Personal Tax Rates Encourage Entrepreneurial Activity?*, 45 IMF STAFF PAPERS 49 (1998) (noting the positive externalities associated with innovative entrepreneurship and arguing that disparities between corporate and individual income taxes encourage entrepreneurship); and James Poterba, *Venture Capital and Capital Gains Taxation*, *in* 3 TAX POLICY AND THE ECONOMY 47, 48–56 (Lawrence H. Summers ed., 1989) (arguing that reductions in the capital gains rate can increase the level of venture capital activity by encouraging entrepreneurs to join startups).

[120] *Cf. generally* David M. Schizer, *Realization as Subsidy*, 73 N.Y.U. L. REV. 1549 (1998) (noting that another economically inaccurate regime, the realization rule, can be viewed as a subsidy with the appealing attribute of credibility).

[121] While wages are generally taxed as ordinary income, the exception we describe is one of at least three available to entrepreneurs. Capital gain treatment is also available to entrepreneurs who can characterize their contribution as property, instead of services, although this should be a relatively small group in the high-tech context. *See supra* note 55. Likewise, capital gains are available to entrepreneurs who do not seek outside equity financing. In return for a modest cash contribution, they can purchase 100% of the firm's stock. Thereafter, they can pay themselves a modest salary while earning most of their return through stock appreciation. Again, though, this simple strategy is difficult to use in high-tech startups: given the negative cash flows associated with early-stage high-tech companies, they usually need substantial outside financing to grow a business. In a sense, the planning strategy described in this Article levels the playing field for high-tech startups, allowing them a tax benefit that already is available to the more limited set of firms using the property-contribution and internal-financing strategies.

We doubt that the IRS *intends* to subsidize venture capital in this way.[122] Instead, it is likely that unsophisticated auditing and administrability concerns have spawned the government's tolerance of aggressive valuations. Yet the venture capital community has become accustomed to this tax benefit — recall Joseph Bartlett's colorful reference to "eat-em-up" convertible preferred stock[123] — and can be expected to employ its political muscle to protect the implicit subsidy if the IRS begins challenging liquidation-based valuations.[124] Thus, however it began, the practice now functions as a tax subsidy.[125]

Despite its unintentional origins, the practice has several appealing characteristics when evaluated as a subsidy. First, for a manager to claim this tax benefit, private investors must first determine that the manager's project warrants their participation. Specifically, a private investor must purchase a senior security in order for a low valuation of

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122 Of course, other related venture capital tax subsidies are intentional. *See, e.g.*, section 1202 (offering special reduced tax rate for certain small business stock); section 1045 (providing a rollover for small business stock); *see also* David A. Guenther & Michael Willenborg, *Capital Gains Tax Rates and the Cost of Capital for Small Businesses: Evidence from the IPO Market*, 53 J. FIN. ECON. 385, 396–403 (1999) (finding empirical evidence that section 1202 reduces the cost of capital for qualifying small businesses).

123 *See* 1 BARTLETT, *supra* note 82, at 82–83.

124 In an analogous circumstance, Silicon Valley mobilized to prevent the Financial Accounting Standards Board (FASB) from adopting a more sophisticated approach to financial accounting for stock options, in which the option value of grants would have been expensed. *See, e.g.*, *Stock Options Charade: High Cost Gets Buried in the Footnotes*, Bloomberg News, Mar. 14, 2000, LEXIS, Nexis News Library, Bloomberg News File. FASB compromised by allowing the option expense to be placed in footnotes instead of in the body of the income statement. FASB feared congressional intervention after "Silicon Valley workers staged a protest. FASB was bombarded with almost 1,800 letters denouncing the idea — one of the biggest responses it had ever received for a proposed accounting change. Congress called for hearings." *Id.*; *see also* Mark Schwanhausser, *Accounting-Rule Debate Has Shifted to Overseas: Change in Options Would Trim Profits*, SEATTLE TIMES, Nov. 5, 2001, at C5, LEXIS, Nexis News Library, Seattle Times File. "Flexing its political muscle like never before, the high-tech community turned the U.S. board into a four-letter word on the streets of Silicon Valley. When the board held hearings in the valley in 1994, 3,000 workers rallied in 'Stop FASB' T-shirts." *Id.* The issue arose again in 2002 after a series of financial scandals, but again the accounting rules went unchanged (though some firms voluntarily began expensing options). *See* Karen Talley, *Expensing Options Will Affect Small-Cap Firms*, WALL ST. J., Aug. 19, 2002, at C8 (noting Standard & Poor's report that seventy-six companies have announced an intention to expense stock options).

125 In describing this tax reduction as a "subsidy," our baseline is current law's treatment of wage income. Thus, the tax burden on services provided to high-tech startups (deferred tax at capital gains rates) is a departure from the tax burden generally imposed on wages (current tax at ordinary rates). Of course, it is possible to redefine the baseline so that the tax rule discussed here would no longer seem like a subsidy because it would no longer constitute a divergence from the general rule. If instead the baseline is the law's treatment of entrepreneurship, then the departure that this Article emphasizes is less clear since, as noted above, capital gain is available in other contexts as well. *See supra* note 121. In theory, we could change our normative baseline even more drastically. For example, tax deferral would be the norm under certain types of consumption taxes as long as wages have not yet been spent. Yet such inquiries are beyond this Article's scope, since we do not undertake here to determine the normatively correct tax treatment of entrepreneurship in a world with a perfect tax base.

the common stock to be offered. Thus, the government commits resources (in the form of a tax reduction for the managers) only if private investors are also willing to do so. In the paradigm case, these private investors are sophisticated venture capitalists, who have the expertise to identify and nurture promising projects, who prove their commitment to the ventures by investing their own funds, and who are motivated by performance-based pay and reputational concerns associated with the success of the venture capital funds they operate.[126] As a result, the government can "piggyback" on the judgments of sophisticated private parties.[127] In effect, the government becomes a passive investor in any positive externalities thrown off by a vigorous venture capital market, such as technological advances.

This subsidy thus lets the government avoid either selecting for itself which companies are sufficiently promising to merit direct subsidies or blindly providing the subsidy to all projects without the benefit of any quality screening. If it chose the projects itself, the government would be undertaking the role of venture capitalist without the skills or incentive structure that have developed in the private sector.[128] Government decisionmakers might also be subject to lobbying and other political influences.[129] In addition, the government cannot offer the contributions, aside from money, that venture capitalists make to startups: the venture capitalist also acts as reputational intermediary, management consultant, and performance monitor.[130] With the subsidy described in this Article, however, the provision of these services by a venture capitalist is a functional precondition to favorable tax treatment.[131]

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126 Gilson, *supra* note 20, at 15–28.

127 The venture capitalist's relationship to the government here is like the "branding" role that venture capitalists are known to play with suppliers, customers, and institutional investors. If the venture capitalist takes a venture seriously enough to back it financially, others will take the venture seriously too. *See* Black & Gilson, *supra* note 26, at 254 (noting that involvement of venture capitalists reassures suppliers and customers); Thomas Hellmann & Manju Puri, *Venture Capital and the Professionalization of Start-Up Firms: Empirical Evidence*, 57 J. FIN. 169, 176–81 (2002) (discussing the contributions of venture capitalists to a portfolio company's business).

128 Ralf Becker and Thomas Hellmann have provided an instructive account of the failure of a German governmental effort to provide a direct subsidy to early-stage technology. RALF BECKER & THOMAS HELLMANN, THE GENESIS OF VENTURE CAPITAL: LESSONS FROM THE GERMAN EXPERIENCE (Graduate School of Business, Stanford Univ., Working Paper No. 1705, 2000). *Cf. generally* James M. Poterba, *Capital Gains Tax Policy Toward Entrepreneurship*, 42 NAT'L TAX J. 375 (1989) (finding that the Small Business Innovation Research Program, a direct-grant program implemented in the United States, served a useful certification function, but produced inconsistent results across regions and industries).

129 *See* Gilson, *supra* note 20, at 47.

130 Black & Gilson, *supra* note 26, at 253–55.

131 As noted above, there are other ways of attaining capital gains treatment that do not involve venture capitalists and senior securities, such as characterizing the entrepreneur's contribu-

A further advantage is this subsidy's narrow scope. While this strategy benefits risky startups — and, indeed, is especially vital in the venture capital context because incentive compensation is so important — it is not readily transplanted to mature firms. To claim this tax benefit, a firm must possess a number of characteristics. First, it must not be currently profitable, so that the loss of compensation deductions will not be a problem.[132] Second, the firm must have a significant potential for profit, so that employees will be enthusiastic about option-like equity compensation. Third, the compensation must be difficult to value currently, so that an aggressive tax valuation can be taken with a straight face; yet the compensation must also not be difficult to value in the future, so that executives can eventually become liquid. Finally, the firm must be risky. The tax benefit, after all, aims to enable managers to avoid ordinary income tax on the "option" value of the common stock. The riskier the firm, the greater this option value will be. High-tech startups obviously satisfy all of these conditions, but other firms typically do not.[133]

Ease of administration is another favorable characteristic of this self-executing subsidy. This sort of subsidy largely avoids two common costs of tax expenditures: adding complexity to the tax system and distorting taxpayer behavior. The relevant tax rules here are easy to administer. The subsidy depends on the IRS's reluctance to challenge low valuations of common stock. Ironically, it could prove more administratively costly to eliminate the subsidy by constantly litigating valuation. Indeed, the tax authorities, in tolerating the current practice, presumably have been more interested in administrability than in subsidizing high-tech startups. By analogy, administrability was certainly the reason for the favorable tax treatment of partnership profits interests. The government presumably did not intend to subsidize activity carried out in the partnership form (nor did it believe that the option value was zero). Additionally, it is not especially onerous, from the taxpayer's perspective, to claim the tax benefit in the venture capital context: the key is to use both common and convertible preferred securities. While this tiered capital structure may not suit everyone,

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tion as property or not seeking outside equity financing, but these strategies are generally unsuitable for high-tech startups. *See supra* note 121.

132 As noted above, the manager's tax strategy has an offsetting tax cost to the firm: reducing the firm's deductions for compensation expense. *See supra* note 57. While a profitable firm would regret losing these deductions, an unprofitable firm has less need for them.

133 The narrowness of this measure's scope is not easy to duplicate. For instance, it would be difficult to draft a statutory test for determining whether a firm is risky. *See* Poterba, *supra* note 128, at 383–84.

there are obviously nontax reasons to use it, including the incentive, signaling, and control rationales discussed above.[134]

A final characteristic of this self-executing subsidy is that, in setting the subsidy's size, it substitutes the market for the congressional budgeting process. The venture capital market is cyclical, as the current downturn demonstrates. Thus, the efficient size of the subsidy depends on the presence of promising new technologies to finance, which will change based on the fits and starts of scientific progress. Congressional budgeting necessarily lags behind the market's evaluation of the level of attractive financing opportunities because of the government's lack of expertise and the inevitable delay associated with the political process. A self-executing subsidy automatically keyed to the level of venture capital financing constantly adjusts to the market's assessment of the level of viable projects.

Of course, these significant advantages must be balanced against potential disadvantages, although we believe that the disadvantages generally are manageable, assuming a subsidy is desired. First, there are the familiar disadvantages of relying on tax rules instead of on direct government expenditures.[135] As with any tax expenditure, this subsidy may be hard for the political process to monitor. In addition, while it is easy to cap a direct grant, capping is more difficult here because it requires a limit on the amount of option value that could be spared from immediate taxation.[136] Nevertheless, the venture capitalist's self-interest limits the amount of equity the entrepreneur receives and, as noted above, the fact that the overall subsidy's size shifts with the level of venture capital funding is an advantage.

A further concern is that taxpayers must take aggressive positions to claim the subsidy. Thus, aggressive taxpayers fare better than conservative ones. Not only is this disparity inequitable, but it also can have unfortunate incentive effects. When the government fails to respond to aggressive tax planning in one context, aggressiveness is likely to increase in other contexts as well, undermining the culture of

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[134] If it is onerous to use this capital structure, the subsidy theoretically could be improved by making it more broadly available (in an all-common capital structure, for example). Yet there is a risk that the subsidy would become too widely available (to mature industries as well as startups, for example). An advantage of the current subsidy, as noted above, is relatively narrow tailoring. *See supra* p. 913.

[135] *See supra* note 13.

[136] Another potential disadvantage is that this subsidy does not allow the government to favor first-time or low-income entrepreneurs and managers. The subsidy here has the opposite effect: high-bracket taxpayers benefit the most from transforming ordinary income into capital gain, and social policy concerns are unlikely to influence venture capitalists' selection of projects. Yet if the goal is efficiency instead of equity, it is appropriate to target ventures that have earned the confidence of professional investors and use other programs to pursue distributional goals.

voluntary compliance.[137] Yet the government can address this concern in more than one way. While the obvious response is to challenge aggressive valuations, an alternative is to issue a notice accepting them as a matter of law. As with partnership profits interests, the liquidation method can be expressly approved in this context. Through a notice, conservative taxpayers will be free to claim the tax benefit, such that aggressiveness will no longer be rewarded.

A final problem with current law is that although the government can rely on the judgments of private parties, it has no opportunity to evaluate the soundness of these judgments.[138] Unlike an investor in a venture capital limited partnership, the government cannot decline to reinvest if past investments have performed poorly. In theory, moreover, the tax subsidy is available as long as *someone* buys convertible preferred stock — not just a venture capitalist, but also the entrepreneur's unsophisticated father-in-law (although "angel" investors generally do not invest through convertible preferred stock[139]). The subsidy is, in effect, a government investment in an index fund composed of all startups that can secure external financing. In a direct expenditure program, by contrast, the government could decide which co-investors to trust. Yet, as noted above, the government is not necessarily up to this task. Thus, the absence of a screening process is simply the flip side of one of the subsidy's advantages: the government does not make project selection choices.

On balance, then, the subsidy identified here has significant advantages, as well as potential disadvantages that strike us as largely manageable. Ultimately, though, our point here is not to advocate particular forms of venture capital subsidies; indeed, we have not addressed the substantive case for a subsidy at all. Rather, we want only to highlight the unusual characteristics of the indirect subsidy that has developed. Direct subsidies to foster a venture capital industry are commonplace in other countries, typically with quite limited success.[140] The self-executing subsidy we have highlighted here has characteristics — especially the use of properly incentivized intermediaries as the subsidy's gatekeepers — that may prove useful in such efforts.

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137 *See* David M. Schizer, *Sticks and Snakes: Derivatives and Curtailing Aggressive Tax Planning*, 73 S. CAL. L. REV. 1339, 1353 (2000) ("As planning becomes widespread, it can undermine the morale of conservative taxpayers (a form of deadweight loss) and increase the government's administrative costs (e.g., if norms change so that taxpayers are less likely to comply voluntarily).").

138 Similarly, the private parties are insulated to an extent from the adverse effects of a poor decision because they have senior securities. Yet the economic significance of this protection should not be overstated, *see supra* section II.A.2. We are indebted to Jim Hines for this point.

139 George W. Fenn et al., The Role of Angel Investors in Financing High-Tech Start-Ups 9–10 (1998) (unpublished manuscript, on file with the Harvard Law School Library).

140 *See* Gilson, *supra* note 20, at 45–47.

VI. CONCLUSION

In this Article, we have extended the financial economics literature on the ubiquity of convertible preferred stock in venture capital structure. We have explained how the use of this security triggers a tax reduction for the intensely incentivized management compensation that is central to venture capital contracting. We have also emphasized the advantages of this form of self-executing subsidy: the government uses properly trained and incentivized private parties, instead of a bureaucracy, as a gatekeeper for the subsidy. More generally, we have illustrated the vital link between tax and capital structure, and have emphasized the need to examine deep institutional detail to illuminate the complexities of capital structure and security design.